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ABSTRACT

A study of the unmet postsecondary educational needs of residents of a five-county area in northeastern Pennsylvania was conducted by means of surveys of 10,000 high school students, 10,000 adults, and 76 area employers. In addition, educational statistics of the area populations and an analysis of constraining geographic and economic factors were considered. Findings indicated a need for additional postsecondary opportunities. A number of alternatives were considered for establishing community college programs in the region, and enrollment projections and cost estimates were prepared. The concept of a "community college/technical institute without walls" was recommended, in which classes and student services would be made available in existing facilities scattered throughout the area. Initial enrollment of 700 full-time equivalent (FTE) students was projected for the first year, rising to 1,600 FTE in five years. Total operating costs were estimated at $894,900 for the first year and at $2,720,000 after five years. Summaries of survey responses, enrollment projections, area postsecondary resources, alternative courses of action, and financial considerations are described in the report. Appendices include the survey instruments and detailed survey responses. (JDS)

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ALTERNATIVE COMMUNITY COLLEGE EDUCATION SYSTEM STUDY

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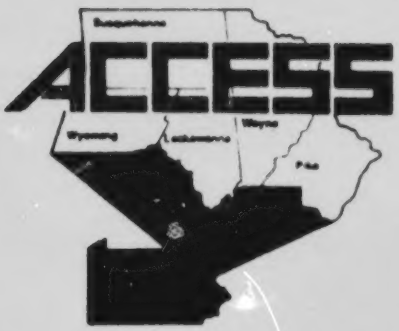

A NEEDS AND FEASIBILITY
STUDY

FEBRUARY, 1977

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EXECUTIVE SUMMARY

This study report examines the unmet needs for postsecondary education in the Counties of Lackawanna, Pike, Susquehanna, Wayne and Wyoming in northeastern Pennsylvania, and proposes several alternative courses of action in response to the need.

Needs were assessed through a combination of surveys of high school students, adults and employers in the region; by an examination of education statistics of the populations; and through analysis of the geographic and economic factors which may act to constrain educational opportunity. The major findings of the needs analysis can be summarized as follows:

* In the five counties, 50% of the surveyed high school students plan to continue their education beyond high school; however, in Susquehanna, Wayne and Wyoming, only 38% to 43% indicated such plans.

* Educational statistics indicate that the proportion of high school students from Susquehanna, Wayne and Wyoming Counties which have actually continued on into postsecondary education is well below the Commonwealth average.

* Several hundred students from the high school graduating classes each year apparently do not continue into further education because of financial reasons. Some 13% of the graduates who indicate they are "A" and "B" students do not plan to continue their education. This proportion reached 19% in Susquehanna County.

* Over 1,100 high school students (11% of those responding) responded "yes" when asked whether they would plan to attend community college programs within a reasonable commuting distance at a cost of approximately $500 per year.

Survey responses were received from over 10,000 high school students, nearly 10,000 adults and 76 business, industry and professional employers. The employers either responding to the questionnaire or to a follow-up telephone interview employ approximately 8,549 persons within the five-county area. As indicated above, a substantial number of students indicated an interest in attending a community college program in their local area, and 23% of the adult respondents also noted that they would attend. In each county except Wyoming, a majority of the adults felt there was a need for community college programs, while only 10% believed there was not a need.

The majority of business, industry and professional respondents responded with a favorable or very favorable attitude toward establishment of community college programs.

On the basis of survey responses and experience with community colleges elsewhere in Pennsylvania, enrollments are estimated for a five-year period. Initial enrollment of recent high school graduates and adults is over 700 Full-Time Equivalent (FTE) students the first year, increasing to some 1,600 persons in five years. Fiscal estimates of a community college "without walls" indicate a total cost of some $894,900 for the first full operating year with $344,500 being paid by the Commonwealth, $252,100 by the local sponsors and $298,300 from student tuition costs of some $387 per student. It is expected that enrollment would level off after approximately five years at approximately 1,600 FTE students and as estimated cost of $2,720,000. The Commonwealth share would be $1,006,000; local sponsors $804,000; and $920,000 from student tuition.

The central model of a delivery system which might be implemented in the five-county area is the concept of a community college "without walls" which would have the following major characteristics:

* Existing classroom, library and laboratory facilities in the local area are utilized and no new buildings would be built;

* Instructional services would be obtained from existing postsecondary institutions, area vocational technical schools, part-time instructors who are qualified in their specific areas, and through cooperative efforts of local business and industry;

* Classes would be offered at various geographic locations throughout the five-county area as dictated by reasonable commuting distances, class size, and scheduling of resources; and counseling and registration services would be similarly decentralized;

* Programs can be offered leading to the Associate Degree in technical and career areas, or two years of credits can be earned for transfer to a full four-year college program at another institution, or certificate programs of less than two years duration can be developed to fulfill the specific employment needs of residents and businesses in the area;

* Because there is no need for large capital investment and because of the Commonwealth assistance provided for under the Community College Act of 1963, community college education can be brought to the residents at a cost to the full-time student of less than $500 per year and to the part-time student at approximately $20 per credit; student financial assistance grants would also be available;

* An "open admission" policy would be in effect assuring that all citizens of the area have the opportunity for enrollment; and

* Control over the college policies and philosophy is the responsibility of the local Board of Trustees appointed by the County Commissioners.

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ACKNOWLEDGEMENTS

Financial assistance for the preparation of this study report was received from the Pennsylvania Department of Education, the County Commissioners of Lackawanna County and the Scranton Area Foundation. In addition to the financial assistance, the Department of Education offered consultation and data through staff members of the Commissioner for Higher Education and the Division of Education Statistics of the Bureau of Information Services. To supplement the financial assistance, the Northeastern Educational Intermediate Unit and the public and nonpublic school districts provided valuable services in assisting with the difficult task involving distribution and return of survey forms.

Further assistance was received from the Greater Scranton Chamber of Commerce, the Economic Development Council of Northeastern Pennsylvania, and the Northern Tier Regional Planning and Development Commission in providing background information on the area as well as suggestions for the survey design. In addition, newspapers, and radio and television stations in the area provided news coverage, and the newspapers contributed to the project by printing survey forms as a public service.

The Advisory Committee and the County Commissioners of the five counties have been of considerable assistance in meeting to review the progress of the Project Coordinator and Project Director, and to offer constructive comments and suggestions.

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INTRODUCTION AND BACKGROUND

This study was undertaken as a result of efforts by the Northeast Pennsylvania Regional Planning Council for Higher Education and the project Steering Committee made up of the chief executive officers of the Johnson School of Technology, Keystone Junior College, Lackawanna Junior College and the Worthington Scranton Campus of the Pennsylvania State University.

Discussions between the Steering Committee and the Pennsylvania Department of Education over the past several years led to the submission of an application for financial assistance in May 1976, and approval by the Department. The Steering Committee named Dr. C. R. Walther Thomas as Project Coordinator and Local Government Research Corporation, of State College, as the Project Director with responsibility for data collection, analysis and preparation of this feasibility study report.

The Steering Committee also invited some thirty-five citizens representing leadership in various fields of local government, business, labor, education and civic affairs to serve as an Advisory Committee for the project. The Advisory Committee met several times to review the plans for conducting the survey, the mechanics for distributing and receiving the survey forms, to review and make suggestions relative to the design of the survey forms, and to discuss the preliminary survey results and the various delivery system alternatives. Draft copies of this report were distributed to the Advisory Committee members and their suggestions and comments were solicited.

The Steering Committee selected the acronym "ACCESS", as an appropriate designation for the study project. ACCESS is derived from the phrase

Alternative Community College Educational Systems Study which generally describes the purposes of the program including:

* An examination of the nature of the needs of students, adults, and business and professional employers for alternative post-secondary education opportunities in the Northeast Pennsylvania area;

* Definition of alternative delivery systems which can meet the expressed needs and utilize the resources of the existing institutions of higher education with an emphasis on a community college "without walls" concept; and

* Estimates of enrollments and costs to students, the local sponsors and the Commonwealth expected to result from implementation of a community college/technical institute "without walls".

The following section of this report summarizes the responses of surveys of high school students, adults, representatives of business and industry and professional persons in the area. Subsequent sections present alternative courses of action, enrollment projections and estimates of costs. The Appendices contain a description of the study area in terms related to educational planning, copies of the information brochures and questionnaires utilized in the study and a detailed description of responses to the various surveys.

ESTIMATES OF NEED FOR ALTERNATIVE POSTSECONDARY PROGRAMS

In this section of this report, data will be presented to add insight into "unmet needs" for alternative postsecondary educational programs in the five-county northeast Pennsylvania Study area. That some degree of need exists is obvious from a cursory examination of physical accessibility in three or four of the five counties, as well as from comparisons of such statistics as per capita income, employment and the percentages of high school graduates going on into some form of higher education. The real and difficult questions are:

* What is the extent of the need among young people and adults;

* What are the characteristics of the need; and

* Do the needs of the potential consumers of postsecondary educational programs correspond to the needs of the area employers?

The quantitative and qualitative information presented on the following pages is intended to assist advisory bodies and decision-makers in the five counties to determine which, if any, of the alternative courses of action are most appropriate for the area.

Defining the meaning of need for additional postsecondary opportunities in the context of this project has been a somewhat difficult task due to the subjective nature of the term. Simply because a need may be indicated in terms of the selected definition does not necessarily mean action is appropriate until the indicators have been favorably compared with the costs involved. Dictionary definitions of need speak in terms of "a lack of something necessary ..... or useful" among others. Putting this

general definition in terms relevant to this study, need on the part of young people and adults in the five county study area is being addressed in terms of the following:

* Lack of physical accessibility - e.g. distance, commuting time, incompatibility of education schedules with work schedules, etc.

* Financial constraints - a belief by an individual that he or she cannot afford postsecondary education, or that to enter such a program would require giving up a needed job.

* Admission standards - judgments of the real or imagined academic performance of an individual with respect to acceptability in traditional postsecondary education.

* Lack of particular programs of study which the individual desires.

The above indicators of need are taken from the viewpoint of the direct consumer of postsecondary education. These indicators (particularly the last one) have been combined with information from employers in the area concerning their needs for employees with up to two years of post-secondary education.

In the following paragraphs, the results of surveys of high school students and adults are presented separately and on the "demand" side, the responses from business, industry and professional employer questionnaires are described. These indicators of demand from employers are supplemented with various employment information and statistics from the Pennsylvania Bureau of Employment Security (BES) related to demand for trained employees.

The questionnaire data discussed here represent a summary of the total responses. Detailed presentation of the survey results is contained in Appendix IV.

Student Survey

Over 16,000 questionnaires were distributed to public and non-public school students in grades 10, 11, and 12 throughout the five counties. Each survey form was accompanied by a brochure describing the concept of a "community college without walls", and a sheet of guidelines for homeroom teachers was also provided to assist in administering the survey in the schools. Distribution and return of the questionnaires was through the Northwestern Intermediate Unit courier service to each of the public school districts, and the non-public schools were mailed survey packages directly by LGR. To facilitate the survey process, LGR representatives held meetings with the various school superintendents to discuss the procedures and to request cooperation and assistance. All agreed to assist in delivering forms to their respective schools and in returning the responses.

The tables on the following pages indicate the number of student questionnaires distributed and returned from public and non-public school districts, and from each of the five counties. The overall public school response rate was 69%, ranging from a high of 83% in Pike County to a low of 66% in Lackawanna County. All school districts except Mountain View are represented in the responses. Apparently the lack of response from Mountain View was due to oversight rather than a lack of willingness to respond.

It should be noted that the total number of responses to each question by county may not equal the total number of responses for the county because some students did not answer all of the questions or because some students marked the questionnaire improperly.

TABLE 1

DISTRIBUTION OF SURVEYS - PUBLIC SCHOOLS

School District	Number of Surveys Distributed	Number of Surveys Returned	Response Rate
LACKAWANNA COUNTY			
Abington Heights	1,000	886	89%
Carbondale Area	500	468	94%
Dunmore	700	556	79%
Lakeland	500	286	57%
Mid Valley	500	247	49%
North Pocono	700	568	81%
Old Forge	350	333	95%
Riverside	550	467	85%
Scranton City	3,500	1,596	46%
Valley View	800	685	86%
PIKE COUNTY			
Delaware Valley	450	374	83%
SUSQUEHANNA COUNTY			
Blue Ridge	400	380	95%
Elk Lake	350	312	89%
Forest City	250	206	82%
Montrose	600	439	73%
Mountain View	400	0	0%
Susquehanna	300	269	90%
WAYNE COUNTY			
Wallenpaupack	475	252	53%
Wayne Highlands	800	625	78%
Western Wayne	500	426	85%
WYOMING COUNTY			
Lackawanna Trail	400	299	75%
Tunkhannock	900	663	74%

TABLE 2

DISTRIBUTION OF STUDENT SURVEYS BY COUNTY

County	Number of Surveys Distributed	Number of Surveys Returned	Response Rate
Lackawanna	9,100	5,992	66%
Pike	450	374	83%
Susquehanna	2,300	1,606	70%
Wayne	1,775	1,303	73%
Wyoming	1,300	962	74%
TOTALS	14,925	10,237	69%

TABLE 3

DISTRIBUTION OF NON-PUBLIC STUDENT SURVEYS

Number of Surveys Distributed	Number of Surveys Returned	Response Rate
1,425	387	27%

As a guide to the discussion of survey responses and to assess how closely the responses correspond to actual activities of students in the five-county area, Tables 4a and 4b list the post-graduation activities of the 1974 and 1975 high school graduates. These data have been drawn from "Our Schools Today", Pennsylvania Department of Education.

The responses to the first 7 questions on the questionnaire provide a profile of the student respondents. The responses were fairly divided between 4,890 males and 5,307 females. There was also a good balance between the three grade levels: 3,746 tenth graders; 3,594 eleventh graders, and 3,380 twelfth graders. A college preparatory curriculum was being taken by 4,556, or 43% of the students, while business and vocational-technical programs were being taken by more than 30% of the students. Some 6,707, or 63% of the students indicated they had "A" or "B" grade averages in school, however the range of this response was from 66% in Lackawanna County to 61% in Susquehanna to 58% in the remaining three counties.

Question 8 asked students if they planned to continue their formal education after high school. As indicated below, one-half responded "yes", however, considerable variation between counties was evident.

	Yes	Undecided	No
ALL COUNTIES	5,304 (50%)	2,995 (28%)	2,407 (22%)
Lackawanna	3,585 (54%)	1,772 (27%)	1,264 (19%)
Pike	269 (54%)	136 (27%)	97 (19%)
Susquehanna	559 (38%)	474 (32%)	433 (30%)
Wayne	529 (42%)	399 (32%)	338 (27%)
Wyoming	362 (43%)	214 (25%)	275 (32%)

The pattern of responses to this question follows quite closely the actual experience of 1974 and 1975 graduates shown in Tables 4a and 4b.

NUMBER OF GRADUATES (1974)

Post-High School Activity	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total	5-County Percentage	State-Wide Percentage
College or University Outside of Pennsylvania	105	28	42	22	6	203	5%	7%
Community College	26	-	8	7	7	48	1	6
Private Junior College	207	1	14	12	19	253	6	1
The 13 State Colleges and Universities	279	13	49	38	44	423	10	9
Commonwealth Universities*	254	2	39	22	23	340	8	8
Independent Colleges and Universities (4 year)	380	15	31	30	12	468	11	7
Business or Technical School (AST or ASB degree)**	115	-	10	9	-	134	3	2
Business School (Non-Degree)	6	7	4	9	-	26	1	1
School of Nursing	102	-	25	9	7	143	3	2
Vocational-Technical School	78	5	14	27	5	129	3	2
Other School	47	2	10	2	3	64	1	1
SUBTOTALS	1,599 (55%)	73 (53%)	246 (39%)	187 (40%)	126 (43%)	2,231 (50%)	52%	46%
Armed Services	92	5	62	18	15	192	4	4
Clerical Workers	180	11	34	22	13	260	6	8
Farm Workers	16	-	26	23	12	77	2	1
Homemakers	49	6	34	18	15	122	3	2
Laborers (Unskilled)	117	14	49	39	28	247	6	8
Operators (Semi-Skilled)	221	7	63	52	14	357	8	4
Professional-Technical Workers	19	-	6	13	-	38	1	1
Sales Workers	126	7	13	30	9	185	4	5
Service Workers	81	5	15	14	9	126	3	4
Skilled Crafts Workers	32	3	11	14	6	66	1	3
Unemployed	99	5	28	18	33	183	4	6
Unknown	284	2	39	14	16	355	8	9
TOTALS	2,915	138	626	462	296	4,437		

* Includes Lincoln University, The Pennsylvania State University, University of Pittsburgh and Temple University.
** AST - Associate in Specialized Technology; ASB - Associate in Specialized Business

TABLE 7.1

DISTRIBUTION OF 1974 PUBLIC 12TH GRADE GRADUATES

NUMBER OF GRADUATES (1975)

Post-High School Activity	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total	5-County Percentage	State-Wide Percentage
College or University Outside of Pennsylvania	104	4	43	30	19	200	4%	6%
Community College	35	10	14	6	4	69	1	6
Private Junior College	171	6	21	21	37	256	5	1
The 13 State Colleges and Universities	315	28	44	47	18	452	9	9
Commonwealth Universities*	315	7	42	57	35	456	9	9
Independent Colleges and Universities (4 year)	340	6	45	29	29	449	9	7
Business or Technical School (AST or ASB degree)**	121	-	22	21	7	171	4	2
Business School (Non-Degree)	2	4	6	14	-	25	1	1
School of Nursing	106	3	18	7	5	139	3	2
Vocational-Technical School	138	10	18	20	1	187	4	3
Other School	82	-	4	6	2	94	2	1
SUBTOTALS	1,729 (56%)	78 (55%)	277 (38%)	258 (47%)	157 (43%)	2,499 (52%)	52%	47%
Armed Services	134	4	76	30	19	263	5	4
Clerical Workers	212	13	39	34	18	316	7	6
Farm Workers	4	-	26	17	9	56	1	1
Homemakers	34	5	34	13	13	99	2	2
Laborers (Unskilled)	148	18	92	50	39	347	7	6
Operators (Semi-Skilled)	139	1	39	29	19	227	5	3
Professional-Technical Workers	10	1	6	10	1	28	1	1
Sales Workers	151	-	40	25	21	237	5	5
Service Workers	79	1	30	35	11	156	3	4
Skilled Crafts Workers	54	4	1	11	14	84	2	2
Unemployed	148	11	44	21	34	258	5	8
Unknown	225	5	31	10	7	278	6	10
TOTALS	3,067	141	732	543	362	4,845		

* Includes Lincoln University, The Pennsylvania State University, University of Pittsburgh and Temple University.
** AST - Associate in Specialized Technology; ASB - Associate in Specialized Business

TABLE 4b

DISTRIBUTION OF 1975 PUBLIC 12TH GRADE GRADUATES

The propensity to continue into higher education appears to be influenced by physical accessibility, income level, quality of public school education and the education level and attitude of parents. In the table below, statistics related to these factors have been arrayed along with the percentage of "yes" responses to Question 8.

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming
"Yes" Response	54%	54%	33%	42%	43%
Per Capita Income	$4,386	$4,886	$4,067	$4,209	$3,828
Per Pupil Public School Expenditures (1975)	1,101	1,386	1,123	1,131	1,116
Percent of Adults who have attended College (1970)	13.1%	16.7%	12.1%	11.5%	15.8%
Approximate mileage to postsecondary institutions (miles)	5-15	10*-30	30-35	30-35	20-25

* Distance to Delaware Valley Community College Center.

The Table above does not, in itself, offer solutions to the question of need for additional postsecondary education opportunities, however, it does indicate some relationship between the elements of need and the educational aspirations and plans of high school students of the area.

The "no" responses to Question 8 concerning educational plans beyond high school were also examined. Of the 2,407 respondents saying they had no plans to continue, the reasons given were as follows:

	Number of Responses	Percentage of Total Reasons Noted
Want to get a full time job	1,462	34%
Parents don't want me to	35	1%
Not confident	145	3%
Want to get married	394	9%
Can't afford it	353	8%
Plan to enter apprenticeship	147	3%
Entering armed services	433	10%
Tired of school	765	18%
Other reasons	528	12%

The reasons given for responding "no" are listed by County in Appendix IV. Since financial constraints have been identified as one possible element of need, the number and percentage of students giving the reason, "can't affort it" in response to Question 8 is shown below:

	Number of Students Responding "Can't Afford It"	Total Number of Respondents	Percentage of Total Number of Respondents
ALL COUNTIES	355	10,724	3%
Lackawanna	133	6,630	2%
Pike	19	502	4%
Susquehanna	84	1,472	6%
Wayne	69	1,269	5%
Wyoming	50	851	6%

Since the number of public and non-public high school graduates annually from the five-county area is approximately 5,500, applying the above percentage of 3% would indicate that some 165 students of each year's graduating class are not going into postsecondary education because of real or perceived financial problems.

The responses were also tabulated to determine the number of students reporting an "A" or "B" grade point average who had no plans to continue their education beyond high school, and following are the results of that tabulation:

	Number of A & B Students	Number of A & B Students Responding "No"	Percentage of A & B Students Responding "No"
ALL COUNTIES	6,706	889	13%
Lackawanna	4,316	501	12%
Pike	281	29	10%
Susquehanna	890	172	19%
Wayne	755	115	15%
Wyoming	464	72	16%

Although no statistics are available on a statewide basis with which to compare the above percentages, it does appear that a considerable number of high school students with the capability to do postsecondary education work and to thereby improve their own situation and that of the community are not taking advantage of their potential.

Question 11 asked students "If community college or technical institute programs were available to you within a reasonable commuting distance in the northeastern Pennsylvania area with a cost to the student of approximately $500 per year, would you plan to attend?" The responses are summarized below:

	Yes	Probably	Probably Not	No
ALL COUNTIES	1,159 (11%)	4,306 (41%)	2,920 (28%)	2,078 (20%)
Lackawanna	738 (11%)	2,710 (42%)	1,784 (28%)	1,247 (19%)
Pike	62 (13%)	170 (35%)	154 (32%)	101 (21%)
Susquehanna	166 (12%)	613 (43%)	398 (28%)	265 (18%)
Wayne	139 (11%)	534 (43%)	328 (26%)	238 (19%)
Wyoming	54 (7%)	279 (34%)	256 (31%)	227 (28%)

Except for Wyoming County students, where the number of "yes" or "probably" responses was somewnat lower than average, there was relatively little difference between counties. The somewhat higher positive response from Pike County might be attributed to the existance of the Delaware Valley Community College Center in the Milford area.

Of the 2,407 responding "no" to Question 8 dealing with formal education plans, 507 marked "yes" or "probably" when confronted with the community college question (Question 11) and the information that programs would be offered locally and at a cost of some $500 per year. An implication that could be drawn from this response is that some 507, or 5% of the respondents, did not see themselves going into a traditional program but were able, for one reason or another, to see the possibilities in the non-conventional "without walls" program. The following chart provides a county-by-county breakdown of these responses:

	Responded "No" to Continuing Formal Education	Responded "yes" or "probably" to Community College After Responding "no" to Continuing Formal Education	Percentage of Total Respondents
ALL COUNTIES	2,407	507	5%
Lackawanna	1,264	266	4%
Pike	97	24	5%
Susquehanna	433	101	7%
Wayne	338	66	5%
Wyoming	275	50	6%

In Question 13, students who had responded "yes" or "probably" to the community college question were asked which kind of program they would most likely choose. The responses were as follows:

	College Transfer	Technical Training	Two-Year Career Training
ALL COUNTIES	23%	38%	39%
Lackawanna	24%	36%	40%
Pike	24%	43%	33%
Susquehanna	19%	39%	42%
Wayne	23%	42%	35%
Wyoming	23%	39%	38%

Relatively little variation was noted between counties, except that Susquehanna students indicated a lower interest in transfer programs and a corresponding higher interest in two-year career training.

When the students interested in a community college or technical institute program noted the kind of employment they have considered entering, the vocational choices mentioned most often were:

	Number	Percent of Total
Nurse RN/LPN	448	8%
Auto Maintenance	247	5%
Accounting	230	4%
Secretarial Science	217	4%
Child Care and Guidance	183	3%
Forestry/Wildlife Management	183	3%
Building Construction	169	3%
Medical/Dentist Assistant	159	3%
Electrician	157	3%
Commercial Art	151	3%
Social Work	132	2%
Police and Fireman	130	2%
Teaching	129	2%

A county-by-county breakdown of responses to the question of vocational plans is contained in Appendix IV.

It should be noted that most of the above vocational choices correspond quite closely with the certificate and associate degree programs commonly offered by community colleges in Pennsylvania. Only the Forestry/Wildlife Management Program is not offered by one of the postsecondary institutions in Lackawanna County. As will be noted later however, not all of these vocations are in demand in the area.

In summary, it seems evident that there are at least several hundred high school students from each year's graduating class in need of non-traditional postsecondary opportunities. This is indicated not only by the number of students expressing an interest in participating in local community college programs, but by those who believe they cannot afford conventional postsecondary education, by those who have the grade point average indicating potential but no education plans, and by those who want to get a full time job and are "tired of school". Particularly those in the latter category may be attracted to training programs offered at convenient times and locations with respect to work requirements.

In addition to the survey responses, a review of the statistics describing the low proportion of high school graduates from certain of the counties entering postsecondary education, combined with the relatively long commuting distances to existing institutions indicate that considerable opportunity for individuals and the communities is being lost.

Adult Survey

Students in grades 2, 4, 6, 8, 10, and 12 were asked to take an adult survey form and the information brochure home to their parents, ask them to complete the form and return the completed survey with the student to the homeroom teacher. As would be expected, the number of returned surveys (approximately 28%) is considerably lower than the number of surveys distributed, however a representative sampling has been obtained. In addition to approximately 35,000 surveys that were distributed through the schools, another 10,550 were made available to interested citizens through libraries, service and social clubs, chambers of commerce, county courthouses, labor unions and local governments. Copies of the survey form were also printed at least twice in all the newspapers in the five counties.

The total number of adult surveys returned was 9,907. Of these, 14 were returned from residents of a county other than Lackawanna, Pike, Susquehanna, Wayne & Wyoming Counties. When these out-of-county surveys were subtracted from the total number of adult surveys returned, there remained 9,893 adult surveys from the five county study areas.

Considerably more females, (71%) were among the respondents to the adult survey than males, (29%). All but 131 respondents indicated that they were the parent of a school age child. The distribution of respondents by county was:

Lackawanna	6,846	69%
Pike	446	5%
Susquehanna	1,119	11%
Wayne	1,110	11%
Wyoming	372	4%
TOTALS	9,893	100%

The proportions of the total population of the area in each county are: Lackawanna, 71%; Pike, 4%; Susquehanna, 10%; Wayne, 9%; and Wyoming, 6%. Therefore, as a proportion of population, Pike, Susquehanna, and Wayne are slightly over-represented by the survey returns, while Lackawanna and Wyoming are somewhat under-represented.

In response to the question concerning the need for a community college program to serve the five-county area, 5,593, or 58% indicated "yes". The percentages of "yes" responses in each of the five counties were as follows:

	Yes	Undecided	No
Lackawanna	57%	10%	33%
Pike	67%	8%	25%
Susquehanna	58%	11%	31%
Wayne	68%	6%	26%
Wyoming	48%	25%	26%

Question 7 of the adult form inquired about the interest of the respondents in participating in community college programs noting a tuition cost of approximately $20 per credit and offerings in their local area. Some 2,227 (23%) persons indicated a "yes" response, while 2,981 (31%) marked "probably". Thus, a very large proportion (55%) noted a significant interest.

When asked about the program in which they would be interested in enrolling, the responses were as follows:

Part-Time Evening	3,783	73%
Part-Time Day	1,205	23%
Full-Time	218	4%

The preference for evening programs is understandable among adults because of employment and/or home care responsibilities of many persons during the day. This preference should be considered when instructional schedules are being developed.

The question concerning the kind of community college program the respondent would be most interested in, the responses were as follows:

College Transfer	785	14%
General Knowledge	345	6%
Technical Training	2,271	39%
Two-Year Career Training	1,046	18%
Cultural Improvement	1,317	23%

It is believed significant that in the above distribution, 70% of the responses indicate an interest in technical or two-year career training presumably leading to improved employment opportunities.

Question 10 contained an array of vocational choices similar to those in the student questionnaire. Persons responding to the question concerning the vocational areas which they hope to pursue through additional education indicated greatest interest in the following programs:

	Number	% of Total
Nurse LPN	381	7
Medical/Dental Assistant	334	6
Nurse RN	303	5
Accounting	268	5
Secretarial Science	266	5
Social Work	245	4
Child Care & Guidance	219	4
Interior Design	212	4
Teaching	164	3
Barber/Beautician	164	3

It would appear that two dimensions of need are evident among adults. Except in one county, a majority of the adult respondents believed that a need for local non-traditional postsecondary programs exists. Only some 10% believed a need did not exist. This dimension deals with the expressed need from the "community" standpoint. The second dimension views the adult as a consumer of the opportunities which a college "without walls" could offer. As noted, a strikingly large proportion of the adult respondents are interested in enrolling in programs to improve their employment opportunities or for other reasons. This response bears out the general direction of most community college programs in Pennsylvania (i.e. serving the out-of-school adult population).

Some 23% of the adults responded "yes" to the question concerning an interest in attending community college programs, however, as noted in Appendix IV, this percentage was as high as 26% in Susquehanna and 27% in Wayne County. These two counties have traditionally had lower than average numbers of high school graduates going into education beyond high school and the lowest percentages of adults who have attended college. The high interest in attending may relate to what may have been missed opportunities when these adults were themselves recent high school graduates.

Additional details concerning the adult survey responses are contained in Appendix IV.

Business and Industry Surveys

Using lists from Chambers of Commerce, the Pennsylvania Industrial Directory, and telephone directories, questionnaires and information brochures were sent to a wide variety of business and industrial representatives, distributed among the five counties in approximate proportion to relative populations. Forty-one surveys were returned representing a 8% response.

In addition to this mail survey, a descriptive article and a questionnaire were printed in the "Newsbriefs" newsletter of the Greater Scranton Chamber of Commerce. This newsletter has a distribution of over 1,000 and some 9 responses were received.

To further supplement the business and industry data base, telephone contact was made with the Personnel Director or General Manager of 9 additional business firms in the five-county area employing approximately 4,350 persons.

A total of 8,549 persons are employed by the companies responding to the questionnaires and the telephone interviews. Only 12 companies (20%) indicated that none of their employees required education beyond high school, but at less than the bachelor's degree level. Twenty-eight of the companies indicated that between 1% and 20% of their employees required such training.

Twenty-six (53%) of the companies responding to the mail and telephone surveys indicated they have employment opportunities for people with two years of technical or semi-professional training beyond high school, and 25 of the companies believed this need will increase during the next ten years.

Most of the companies responding to the mail survey indicated that they felt some proportion of their employees would like to obtain training beyond high school. Twenty-five of the companies believed that between 1% and 25% of their employees would be interested in such training.

The majority of the companies (i.e. 31 or 70%) do not have in-company training programs for employees with less than four-year college level training.

When asked the attitude toward establishment of programs of two-year training and two-year transferrable liberal arts programs, the responses to the mail and telephone surveys were as follows:

Very Favorable	14	25%
Favorable	21	38%
Undecided	14	25%
Unfavorable	6	11%

The Chamber of Commerce Survey question concerning support for the idea of a community college "without walls" received the following responses:

Yes	4
Not Sure	4
No	1

On the basis of these responses, over 61% of the companies favor, to one degree or another, establishment of additional training and educational programs.

The specific types of training which the business and industry respondents believed to be of value to their organization which were most frequently noted were as follows:

Bookkeeping and Accounting	Advertising
Business Management	Inspection and Quality Control
Machine Shop Practice	Secretarial
Clerical Practice	Electric Wiring & Meters
Engineering Technician	

Further details of the business and industry survey are contained in Appendix IV.

In summary, although the response to the business and industry questionnaire was disappointing, it should be noted that those who did respond represent the employers of some 6.4% of the 133,000 business and industry labor market in the area. In general, the responses which were received indicated a rather favorable attitude toward the possibilities of regional community college programs. The several respondents who added comments to the questionnaires noted that programs should be made available evenings or on weekends, and that programs should focus on skills directly related to the employment market needs. Several comments were received to the effect that another institution was not needed if it would offer more of the same traditional general education programs already available in the region.

Professional Survey

Of the 160 questionnaires sent to physicians, dentists, hospital administrators, attorneys, engineers, architects and other professional persons in the five-county area, twenty-six (16%) were returned. Most of these employers are relatively small, with twenty-three each employing fifteen persons or less. Three employ sixteen or more persons.

In response to the question which asked whether the respondent believed there is a need for two-year community college-trained personnel, the responses were as follows:

Yes	20 (80%)
No	5 (20%)

When asked whether present needs were being served by existing postsecondary institutions, the responses were:

Yes	16 (62%)
No	10 (38%)

Nineteen of the twenty-six respondents felt they would have a need for the graduates of a community college trained in occupational programs. The specific types of training programs which were of most interest are those listed below:

- General Business
- General Secretarial
- Medical Secretarial
- Accounting
- Medical Lab Technician
- Nursing
- Drafting
- Engineering Technology
- Health & Welfare Services
- Physical Therapy
- Technical Writing

Other Supporting Data

Data available from the District Office of the Bureau of Employment Security (BES) for the Northeast Pennsylvania Labor Area, comprising Lackawanna, Luzerne and Monroe Counties, identified occupations that have been particularly hard-to-fill (indicating a need), or hard-to-place (indicating a surplus).(1) Although these data do not include Pike, Susquehanna, Wayne, and Wyoming Counties, discussions with BES analysts indicated that the need or lack of need for occupational areas should be generally similar.

Because the indicators are dependent upon the state of the economy and the overall employment situation, data from 1974 through 1976 were examined to attempt to identify trends over a period of time. Among the occupations listed consistently as hard-to-fill were:

Secretary	Machinist
Welder	Auto Mechanic

In addition, occupations listed often as hard-to-fill included:

Plant Engineer	Registered Nurse
Diesel Mechanic	Mason/Bricklayer
Bookkeeper	

Except for Registered Nurse, the reason given in the BES report for the hard-to-fill positions was a lack of qualified applicants. The reason for nursing jobs being hard-to-fill was listed as a lack of applicants for shift work. Apparently, there are numerous nurses in the market area, however they are unwilling to work night or weekend shifts.

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(1) Area Manpower Review, Semi-annual from May, 1974, through November, 1976, Pennsylvania Bureau of Employment Security, 135 Franklin Avenue, Scranton, Pennsylvania

The BES data indicated the following occupations consistently hard-to-place:

Teachers	Production Machine Operator
Electrician	Electronics Mechanic
Truck Driver	

Occupations noted as often hard-to-place were:

Accountant	Draftsman
Clerk-Typist	Social Worker

In the case of each of the hard-to-place occupations, the reason given was "surplus supply".

ENROLLMENT PROJECTIONS

One of the factors which will influence a decision to move ahead with the options presented earlier, and particularly the option involving a community college "without walls", is an estimate of the potential enrollment among young people and adults in the several counties of the region. The survey of adults and students (i.e., 18-23 year age range) has been utilized as a source for the projections, supplemented by other data related to experience elsewhere in the Commonwealth.

Student Projections

Past survey experience in other feasibility studies has indicated that it is a reasonable assumption to take 60% of those responding "yes" to the community college survey question (e.g. Question 11) and 40% of those responding "probably" as an estimate of enrollment by high school graduates. Applied to the results of the five-county student survey, the following estimates would be obtained.

	ALL COUNTIES	Lackawanna	Pike	Susquehanna	Wayne	Wyoming
Number of 12th Grade Students Responding	3,380	2,169	146	452	377	236
Number Responding "yes" to Question 11	492	303	29	73	63	24
60% of "yes" Responses	295	182	17	44	38	14
Number Responding "probably" to Question 11	1,259	768	55	186	166	85
40% of "probably" Responses	504	307	22	74	67	34
Enrollment Estimates among 12th Grade Students	799	489	39	118	105	48

The method above would indicate a potential enrollment of some students from those responding to the questionnaire. The overall number of respondents represented some 64% of the total number of 12th graders. If those who did not respond are typical of those who did, the potential enrollment could be as high as 1,240 from this graduating class, using this estimated procedure. Based on experience elsewhere, the number of FTE students in community college is approximately 66% of total enrollment. The first year distribution of the 799 potential enrollees and FTE among the counties is estimated to be as follows:

County	Estimated Enrollment (First Year)	Estimated FTE
ALL COUNTIES	799	527
Lackawanna	489	323
Pike	39	26
Susquehanna	118	77
Wayne	105	69
Wyoming	48	32

Data from the Department of Education indicate that, in those counties which have community colleges, approximately 9.5% of the high school graduates in those counties enroll in the community college (9.6% of 1975 Luzerne County graduates enrolled in the Community College). Applying this experience to the five-county area would produce the following estimates:

County	Approximate Number of High School Graduates	9.5% Enrollment (First Year)	FTE (First Year)
ALL COUNTIES	5,300	503	353
Lackawanna	2,600	342	235
Pike	140	13	9
Susquehanna	740	70	49
Wayne	550	52	36
Wyoming	360	34	24

In the two sets of estimates above, there is some variation as would be expected. The community college "without walls" concept is new in Pennsylvania and a base of data directly applicable is not available. It might be noted, however, that the Delaware Valley Community College Center in Pike County projected an enrollment of 87 FTE students before opening, and in the 1975-76 year experienced an actual 102 FTE, of whom 68 FTE were in credit courses. Of these, 32%, or some 22 students, were in the 18 to 23 year age range of recent high school graduates.

The last five community colleges to be established in Pennsylvania have shown growth over the first five years of between two and three times the initial year enrollment. Averaging the previous estimates and projecting them over a five year period would appear to indicate the following FTE estimates:

	Year 1	Year 2	Year 3	Year 4	Year 5
ALL COUNTIES	440	800	900	1,000	1,100
Lackawanna	278				690
Pike	18				50
Susquehanna	63				160
Wayne	53				130
Wyoming	28				70

It should be noted again that these estimates represent FTE students. The total headcount enrollment should be expected to be approximately 150% of the FTE count.

Adult Projections

Making enrollment projections for adults in community college programs is both more difficult and more hazardous than with students. This results in part from the relatively smaller sample of adults in the survey, and a lack of good statistical data from other community colleges in Pennsylvania.

As noted earlier, substantial percentages of the adults responding to the questionnaire indicated an interest in participating in community college programs. However, it would be unrealistic to extrapolate the attendance rate of the sample to the entire adult population of the region. As an estimator, 60% of the adult "yes" responses to the question concerning attendance in a community college were used to project possible enrollments. The results of this estimation procedure are as follows:

	Number Giving a "Yes" Response to Question Concerning Interest In Attending	60% of "Yes" Responses
ALL COUNTIES	2,227	1,336
Lackawanna	1,500	900
Pike	93	56
Susquehanna	282	168
Wayne	291	175
Wyoming	61	37

The survey data indicate that some 73% of the adults interested in attending would prefer part-time evening courses, while 23% would attend part-time day courses and 4% would be interested in full-time enrollment. On the basis of the above, it is assumed that approximately 75% of the

enrollees would enroll in one 3-credit course, while 25% would enroll in two 3-credit courses at any given time. Based on this assumption, the potential enrollment estimates above would result in the following number of FTE adult students:

	FTE Adults
ALL COUNTIES	420
Lackawanna	282
Pike	18
Susquehanna	53
Wayne	55
Wyoming	12

As noted earlier, there is relatively little statistical data to compare with the survey results. However, the total registrations in adult/continuing education activities for the 1973-74 year are available for Pennsylvania community colleges and can be compared with the population of the sponsor counties as in the chart below:

	Total Registrations	1970 Population (Thousands)	Registrations Per 1,000 Population
Bucks County	2,006	415	5
Butler County	4,031	128	31
Beaver County	4,879	208	23
Delaware County	5,324	600	9
Lehigh County	5,366	255	21
Luzerne County	962	342	3
Montgomery County	5,215	624	8
Westmoreland County	3,397	377	9
Average Registrations per 1,000 population			11

The chart indicates a considerable variation in registrations per 1,000 population, however, it is expected that the study area is most similar to Luzerne County. If it is assumed that adults would enroll at the rate of 3 registrations per 1,000 population, the following estimates would result based on the populations of the five counties of the study area:

	Adult Course Registrations	FTE Adults
ALL COUNTIES	987	247
Lackawanna	702	176
Pike	36	9
Susquehanna	102	26
Wayne	90	23
Wyoming	57	14

Averaging the survey estimate and the comparative data given above would result in estimates of total adults being served by a community college and the potential adult FTE count in the first year as follows:

	Persons Being Served	Adult FTE
ALL COUNTIES	1,062	333
Lackawanna	722	226
Pike	45	14
Susquehanna	128	40
Wayne	125	39
Wyoming	42	13

Summary of Enrollment Estimates

To provide a basis for estimating costs and to assist local decisions concerning the most appropriate course of action, the enrollment estimate for recent high school graduates presented earlier is combined with the estimates for adult enrollment. A 10% per year increase in adult enrollment has been assumed over the first five years of operation. The chart below illustrates estimates of the approximate number of Full-Time Equivalent (FTE) students in each of the first five years:

	Year 1	Year 2	Year 3	Year 4	Year 5
ALL COUNTIES (FTE)	770	1,300	1,400	1,500	1,600
Lackawanna	500				1,040
Pike	35				70
Susquehanna	105				220
Wayne	90				190
Wyoming	40				80

It should be noted again that the above chart represents FTE students and that between three and four times as many persons would actually be receiving community college educational services.

INVENTORY OF POSTSECONDARY RESOURCES

The purpose of this inventory of existing postsecondary educational resources in the five-county area is to illustrate the kinds of two-year programs currently being offered and also to make a very preliminary discussion of classroom space, faculty and other elements which might be utilized in implementing the alternative courses of action discussed in the section which follows.

Table 5 contains an array of the Associate Degree programs currently offered by postsecondary institutions primarily serving the study area, as well as those serving other nearby counties. This information was collected and provided by the Director of the Northeastern Pennsylvania Regional Planning Council for Higher Education. In addition to the Associate Degree programs, Lackawanna Junior College offers certificate programs in accounting and secretarial fields, while Keystone Junior College offers certificates in business and commerce.

It should be noted that most of the areas of interest expressed by adults and young people in the survey are represented by the current Associate Degree offerings. It should also be pointed out however, that most of these programs are only offered on the various main campuses in the immediate Scranton area with emphasis on daytime scheduling. Both of these factors seriously limit access for many working adults. In addition, the relative scarcity of certificate programs (i.e. less than the Associate Degree level) does not appear to correspond to the significant interest expressed in the survey.

The question of the degree of which resources of existing postsecondary institutions would be available on a contract basis to a community

HEGIS CODE	PROGRAM TITLE	JOHNSON SCHOOL OF TECHNOLOGY	KEYSTONE JUNIOR COLLEGE	LACKAWANNA JUNIOR COLLEGE	WORTHINGTON SCRANTON CAMPUS PSU	UNIVERSITY OF SCRANTON	ICS CENTER FOR DEGREE STUDIES	DELAWARE VALLEY COMMUNITY COLLEGE CENTER
5001	Business and Commerce, General		X	X	X			X
5002	Accounting Technologies			X		X	X	X
5004	Marketing, Business, Etc.			X		X		
5005	Secretarial Technologies		X	X				
5103	Computer Program Technologies				X			
5301	Mechanical & Engineering Technologies, General				X	X		
5304	Architectural Drafting Technologies	X			X			
5305	Chemical Technologies						X	
5306	Automotive Technologies	X						
5308	Welding Technologies	X						
5309	Civil Engineering Technologies						X	
5310	Electronics & Machine Technologies	X						
5311	Electromechanical Technologies	X						
5315	Mechanical Technologies						X	
5316	Nuclear Technologies				1*			
5317	Construction & Building	X						
5356	Electrical Engineering Technologies				X		X	
5361	Environmental Pollution Control				1*			
5372	Biomedical Equipment Technologies				1*			
5404	Food Service Technologies		X					
5503	Educational Technologies							X
5505	Police, Law Enforcement					X		
5506	Sociology				X			
5550	Early Childhood Education		X					
5558	Labor Studies				X			
5601	General Arts, Sciences		X		X	X		X

NOTE: 1* = First Year Only

TABLE 5

Associate Degree Programs Offered by Institutions
in the Five-County Study Area

college "without walls" is a difficult one to answer at this point in time. As indicated in the section of this report dealing with alternative courses of action, one or more of at least five different approaches might be utilized depending on the service area of the community college and the nature of the particular programs to be offered. The appropriate time to define which of the methods are most desirable and feasible for all concerned will be after sponsorship is attained and a Board of Trustees is appointed.

Among the factors which will influence the selection and utilization of educational resources in the area will be such things as availability of faculty time, seats available in current course offerings, classroom and laboratory space, and availability of specialized technical equipment and materials.

Over- or under-utilization of postsecondary institution facilities with respect to a community college "without walls" is relevant only for community college classes which might be offered in the immediate Scranton vicinity. In view of the expressed needs and the "without walls" concept, it is expected that a number of courses would be offered in population centers in the other participating counties. As a result, facilities could be arranged in high school buildings, community centers, municipal facilities and others. Generally, such facilities are available, particularly for late afternoon or evening scheduling. Utilization of such facilities would, however, not be suitable for courses requiring specialized tools or equipment. For such courses, students would be required to commute to locations at which the equipment is available; or it may be impossible to offer certain programs because of this restraint.

As noted earlier, at this time the specific capacity to offer specific programs has not been determined. In view of the various possibilities which are available and which have been used successfully in other college "without walls" programs where similar constraints exist, development of a set of beneficial programs with the available resources does not appear to be an insurmountable problem.

ALTERNATIVE COURSES OF ACTION

If it is judged that the need for alternative postsecondary educational opportunities in the area is sufficient to warrant action by the officials of existing educational institutions and/or by county governments and school districts there are a number of actions which can be taken. In this section of the report the most significant of these alternatives will be presented and briefly described. Because the stated objectives of this project revolve around the feasibility of a community college or technical institute "without walls" with the provisions of Act 484 as a mechanism, this alternative will be described in somewhat more detail. However, as will be shown, there are a number of other actions which can be taken which may be judged more desirable.

Figure 1 illustrates the array of options and sub-options which appear most appropriate for consideration. They will be discussed in the following paragraphs.

OPTIONS NOT UNDER THE COMMUNITY COLLEGE ACT (ACT 484)

As indicated in the figure, aside from the "no change" option, there are several actions which might be taken by the various postsecondary institutions which can approach the needs described earlier. Information and/or counseling centers in the several population centers of the counties could be jointly established to act in a "broker" role in providing guidance and assistance to young people and adults in identifying combinations of programs and institutions appropriate to their vocational or cultural needs. Such centers could be strengthened by formalized arrangements for a greater degree of cross-registration between institutions and satellite education delivery centers. The major difference between these options and the existing situation in which several of the institutions

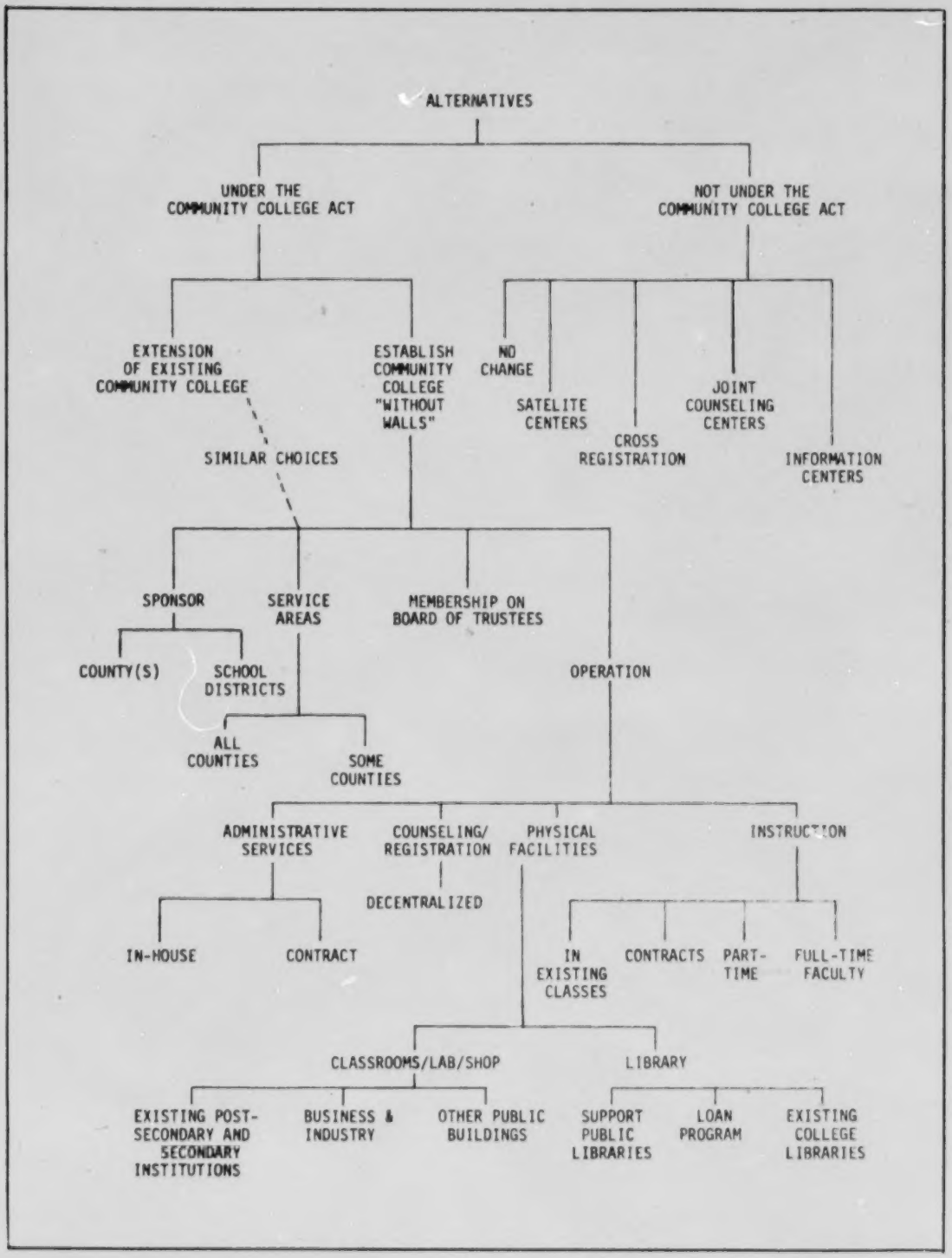


FIGURE 1. ALTERNATIVES

are providing personnel coursework in the outlying counties is that a greater diversity of programs could be offered and be aimed in a planned way at a specific student objective such as a certificate or associate degree.

This combination of options could be institutionalized through the participating institutions jointly obtaining a charter as a non-profit organization. A Board of Directors made up of representatives of the institutions would develop long-range planning and allocation of lead responsibility for various programs to prevent unnecessary duplication. Such a consortium would require a coordinator to work with the various institutions and to direct the operation of the outlying centers in accordance with policy direction of the Board. Duties of a coordinator would also include program planning, financial development and grant support, publicity and public relations. The cost of a consortium of this type could be estimated as follows:

Coordinator	$18,000
Field Counselor	15,000
Secretary	8,000
Fringe Benefits	8,500
Travel	2,000
Rent	4,000
Miscellaneous	2,000
TOTAL	$57,500

Included in the formalized arrangements would be criteria for determining which institution would award certificates or degrees in the various programs. Each institution would charge its own tuition and fees for courses it offers through the cross-registration process. The student market would be established and unnecessary duplication would be avoided. This consortium arrangement could go as far toward implementation of programs as the Board of Directors and available funds would allow.

OPTIONS UNDER THE COMMUNITY COLLEGE ACT (ACT 484)

Extension of Existing Community College

Figure 1 illustrates two basic options which might be exercised under the Community College Act. The first of these would involve an extension of the services of an existing community college to all or parts of the five-county study area. Assuming the "without walls" concept, such an extension could be modeled after the Delaware Valley Community College Service Center or could integrate additional counties or school districts as additional sponsors are provided in the Community College Act.

An extension on the Delaware Valley model would result in nearly complete local autonomy. A local Operating Board would guide the operations of the branch, define the services and programs to be available and raise the necessary local share of costs, all subject to approval by the Board of the existing community college. Since the existing college provides logistical support in terms of financial records, student records and similar administrative functions, the branch requires relatively little administrative manpower. The Delaware Valley center employs a Director and a Community Counselor. All faculty is part-time and the credentials of all applicants are reviewed by the parent community institution. A further description of the Delaware Valley model is contained in the paper "Rural Community Colleges: A Pennsylvania Case Study" written by Dean Kenneth B. Woodbury of Northampton County Area Community College and copies are available from the Northampton County Area Community College.

The second way in which the services of an existing community college might be brought to bear is through an increase in the area of sponsorship. For example, county or school district officials might consider sponsorship in their respective jurisdication. If such sponsorship were consummated, these counties or districts would in effect become shareholders in the community college and take part in the college

decision-making through representation on the Board of Trustees. The operating costs charged to the sponsors could be directly related to the number of students enrolled each semester. In general, the sponsor, the state and the student each pay one-third of the operating costs which have been averaging some $1,500 per student annually. Many of the other decisions which would need to be made are similar to those involved with establishing a new community college "without walls" as described below.

Establishment of a Community College "Without Walls"

The option which appears most desirable in at least parts of the five-county area is the establishment of a community college "without walls" which could offer college parallel transfer programs, associate degree career programs, certificate programs aimed at improving employment skills and courses for cultural improvement and personal interest. Many of the major sub-options, or choices necessary to institute such a program are also shown in the figure. Although under law municipalities can be sponsors, the most frequent approach in Pennsylvania has involved either county or school district sponsorship. Obtaining a county sponsor has the advantage of a relatively large and integral service area, while school district sponsorship may turn out to be a patchwork of service areas if not all school districts in a particular area participate. In addition, the broader tax base of the county may be more appropriate as a source of the local share. Additionally, since the college must have the annual budget approved by the sponsor, the logistics of negotiating the budget with several counties should be less time consuming than negotiations with up to twenty-two school districts.

The service area would, of course, be defined by the specific governmental units choosing to become sponsors. While these decisions are properly to be made by the affected government officials, the needs analysis has indicated several factors which might influence such decisions, for example:

* Less support for the community college "without walls" concept was evidenced in Wyoming County than in the other four counties, both by students and adults. The reasons for this are not entirely clear, however, they may relate to the recent vocational technical school decisions and to the geographical, economic and road network characteristics which appear to link Wyoming County somewhat more closely to Luzerne County than to Lackawanna and the other Counties in the study area.

* Much of the population of Pike County is served by the Delaware Valley Community College Center. The Delaware Valley area may wish to join with a larger (and potentially more comprehensive) community college "without walls" serving the other counties, or to continue current operations unchanged. In the latter instance, it would be possible for the other school districts serving Pike County (i.e., those not part of the Delaware Valley program) to join in sponsorship of the Delaware Valley program or to join in sponsorship of a community college serving other counties in the area.

* Interest in a community college program "without walls" was substantial in Lackawanna, Susquehanna, and Wayne Counties, and as was indicated earlier in this report, enrollment estimates appear sufficient to support a viable operation.

Under the Community College Act and the state rules and regulations, membership of the Board of Trustees may be between seven and fifteen persons appointed by the sponsor. The Board must be representative of the geographic area being served and "shall include members of the professions, business, industry, and other organizations or lay persons". This requirement would not prevent a representative of the participating existing colleges from being named as a member of the Board.

There are a number of choices involved in determining the mode of operation of a community college "without walls" and Figure 1 illustrates many of them. Decisions concerning the specific methods should be left to the Board and administration when final plans are being drawn, however, certain of the key factors will be discussed here.

A characteristic of most successful community college "without walls" programs is to decentralize counseling and registration services. It is expected that such a counseling/registration center would be established in each of the participating counties, and that these centers would offer "one-stop" services to students in the form of career and academic counseling, information concerning admission, financial aid and benefits, registration, class scheduling, and payment of tuition of fees.

It is expected that instruction can be provided by one or more of the following methods, depending on the specific situation.

* Contracts with existing postsecondary institutions in the area to provide for community college students to attend and receive credit for classes which these institutions are regularly offering to their own students.

* Contracts with existing postsecondary institutions and AVTS to provide an instructor and materials for particular community college classes at one or more locations throughout the area.

* Agreements with qualified high school and college level instructors to present one or more classes on a part-time consulting basis.

* Agreements with professional or business people in the area to conduct classes in the specialized area for which they are qualified.

* Certain work-study arrangements with professional, commercial or business establishments in the area.

Arrangements for classroom space, laboratory facilities and similar needs can be arranged in existing public and private schools, libraries, industry and business facilities, municipal buildings, service and social club buildings, or through the rental of suitable space in office and other private buildings.

The provision of adequate library services in a decentralized college program is a difficult problem. Methods that have been used have included financial support to local public libraries, development of improved inter-library loan programs to assure the availability of resource material in a particular location at which specific classes are offered, combined with greater utilization of the library services of participating institutions.

FINANCIAL CONSIDERATIONS

The purpose of making financial estimates for a possible community college "without walls" is to assist potential sponsors to evaluate the approximate costs to establish and operate such a program, and to indicate to the participating institutions the funds which would be available to provide contractual or part-time instructional services.

The Community College Act and its accompanying rules and regulations specify the amount of state assistance offered to community colleges/ technical institutes and also the ways in which local revenue may be provided. The essential elements of the cost sharing formula are as follows:

(1) The Commonwealth shall pay one-half of the operating costs during the start-up phase until the time classes begin. After classes begin, the Commonwealth shall pay one-third of the operating costs per student (FTE) up to a maximum of $1,500 per year. In addition, Act 173 of 1974 provides that the Commonwealth will pay an additional $150 per FTE for each student in certain vocational programs as defined in the Act. In other words, the Commonwealth shall pay up to $500 per student plus $150 for each vocational student.

(2) Funds are also received from student tuition charges which may not exceed one-third of the total annual operating costs. As noted elsewhere in this study, the average total operating cost for community colleges in Pennsylvania was $1,308 in 1974, the average tuition charge was $475 per year in 1975 for residents of the sponsoring counties or school districts.

(3) The local sponsor shall provide contributions which are the difference between the operating costs and the total paid by the student and the Commonwealth. Since the student's share can be one-third, and, because of the additional funds received for students in vocational programs, the County's share will be less than one-third, or less than $500 per student per year. The County's share can be further reduced by grants, gifts, endowments and other sources of funds.

As part of the financial analysis, the start-up and total operating costs for a community college "without walls" are estimated for a five year period and then allocated according to the above rules. Every attempt has been made to be conservative. The numbers of Full-Time Equivalent (FTE) students are believed to be conservative, and if more students actually enroll than have been estimated, the per student costs will be lower, however, total costs would be higher. Similarly, costs have been estimated with some slack built in on the high side. Careful operations and effective negotiation for instructional services may well reduce these estimates.

The cost estimates have been based on the assumption that community college classes could begin in September, 1978 and that a decision will be made in 1977 and a Board of Trustees can be formed and initial operating personnel can begin work late in 1977. This relatively short time assumed for beginning operations is made possible only because of the "without walls" concept of the community college.

Figure 2 contains the basic cost estimate for the first year of operation. The three basic categories of costs in this estimate are the administrative costs, library cost, and instructional cost of $577,500. As noted, for estimation purposes, the instruction cost was based on the estimated FTE faculty required, however it is expected that most if not all of the actual instructional services will be obtained through contractual arrangements with postsecondary institutions in the area. Since some instruction can be offered in existing classes and some will be offered

Assumptions

770 FTE equivalent to 3,080 registrations per semester. At 20 students per section, 154 sections would be required. At an average load of 4 sections per instructor, 38.5 FTE instructors would be required. (Even though FTE instructors are used for calculation, actual instruction is expected to be obtained through contracts or part-time faculty.)

ADMINISTRATION		
President	$30,000	
Director of Admissions	16,000	
Dean of Instruction	18,000	
Chief Fiscal Officer	17,000	
Community Counselor, 3 @ $14,000	42,000	
Secretary, 5 @ $6,500	32,500	
Fringe Benefits @ 15%	23,300	
TOTAL SALARY AND WAGES	$178,800	
Rent	15,600	
Supplies and Materials	25,000	
Travel	8,000	
Publications	20,000	
Miscellaneous	20,000	
TOTAL ADMINISTRATION	$267,400	$267,400 (30%)
LIBRARIES		$ 50,000 (5.5%)
INSTRUCTION		
31 FTE Faculty @ $15,000 (including fringes)		$577,500 (64.5%)
TOTAL		$894,900 (100%)
		($1,160 per FTE)

FIGURE 2. FIRST YEAR COST ESTIMATE

outside of the immediate Scranton area throughout the other four counties, considerable variation in cost from class to class is expected, however the average cost is expected to correspond quite well with the estimate.

Figure 3 is an illustration of the distribution of current expenditures experienced by the existing community colleges in Pennsylvania in the 1973-74 school year. The percentage distribution for instruction and departmental research, for libraries and for other educational and general expenditures (including administration) compare reasonably well with the estimates of Figure 2. Figure 3 does not include payments to principal and interest for capital expenditures incurred in construction of the colleges.

The major activities and costs during the "start-up" phase, are contained in the chart of Figure 4. These costs, which are anticipated until the time that classes begin, total $167,900. As noted earlier, the Commonwealth will pay 50% or $83,950, while the local share from the Counties would also be $83,950.

The estimated total operating costs for the first five years of operation are shown in Figure 5, including estimates of the Commonwealth, student and local share. The full-time equivalent (FTE) student enrollments used in estimating the costs are from the estimates made earlier in this report. Higher enrollments than estimated will result in lower "per student" cost. It is also assumed that 40% of the students would be in "terminal non-liberal arts programs" which would qualify for the additional $150 of state aid per FTE. This percentage is the same as is currently being experienced in community colleges statewide.

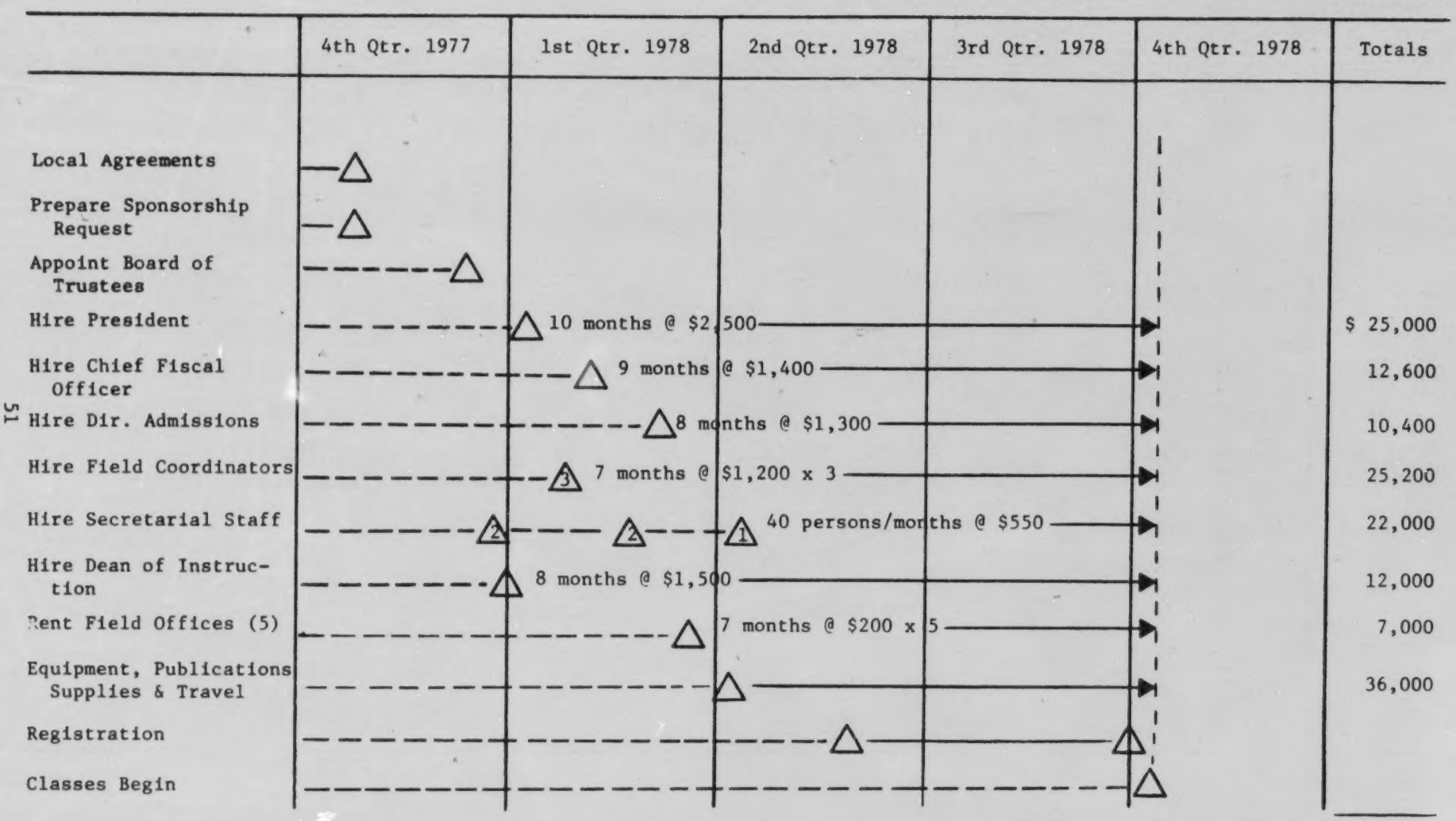
Cost estimates for the second year assume additional staff to accommodate the nearly doubled enrollment as well as a general 10% increase in cost. The 10% inflator is also utilized for estimates for later years.

DISTRIBUTION OF PENNSYLVANIA
COMMUNITY COLLEGE CURRENT EXPENDITURES

	Percent
Instruction and Departmental Research	49.4
Organized Activities Related to Educational Departments	.1
Sponsored Research	.1
Other Separately Budgeted Research	.1
Other Sponsored Programs	2.2
Extension and Public Service	1.5
Libraries	4.3
Physical Plant Maintenance and Operation	11.9
Other Educational and General Expenditures (Primarily Administrative)	30.4
	100%

FIGURE 3

FIGURE 4



Subtotal	152,900
Fringe Benefits	15,000
TOTAL	$167,900

FIGURE 4. Estimated Administrative Start-Up Costs
(50% Payable by Department of Education)

EXPENDITURE AND REVENUE ESTIMATES — FIVE YEARS

Estimated Expenditures	Estimated Revenues		
	State	Sponsor	Students
YEAR 1 - $1,160/FTE			
770 FTE (308 voc.)			
$894,900	$ 298,300		
	46,200		
	$ 344,500	$ 252,100	$ 298,300
		($327)	($387)
YEAR 2 - $1,276/FTE			
1,300 FTE (520 voc.)			
$1,660,000	$ 573,000		
60,000 Added Staff	78,000		
$1,720,000	$ 651,000	$ 496,000	$ 573,000
		($382)	($440)
YEAR 3 - $1,404/FTE			
1,400 FTE (560 voc.)			
$1,970,000	$ 660,000		
	84,000		
	$ 744,000	$ 566,000	$ 660,000
		($404)	($471)
YEAR 4 - $1,544/FTE			
1,500 FTE (600 voc.)			
$2,320,000	$ 773,000		
	90,000		
	$ 863,000	$ 684,000	$ 773,000
		($456)	($515)
YEAR 5 - $1,698/FTE			
1,600 FTE (640 voc.)			
$2,720,000	$ 910,000		
	96,000		
	$1,006,000	$ 804,000	$ 910,000
		($502)	($568)

FIGURE 5

It is recognized that some classes will exceed the average instructional cost estimate and some will be less. In addition, if class sizes are larger than 20, the FTE cost will be lower and if small class sizes are experienced, the cost will be higher. However on balance, based on available information, the estimators above appear realistic and conservative.

APPENDIX I

BRIEF DESCRIPTION OF THE STUDY AREA

REGIONAL LOCATION

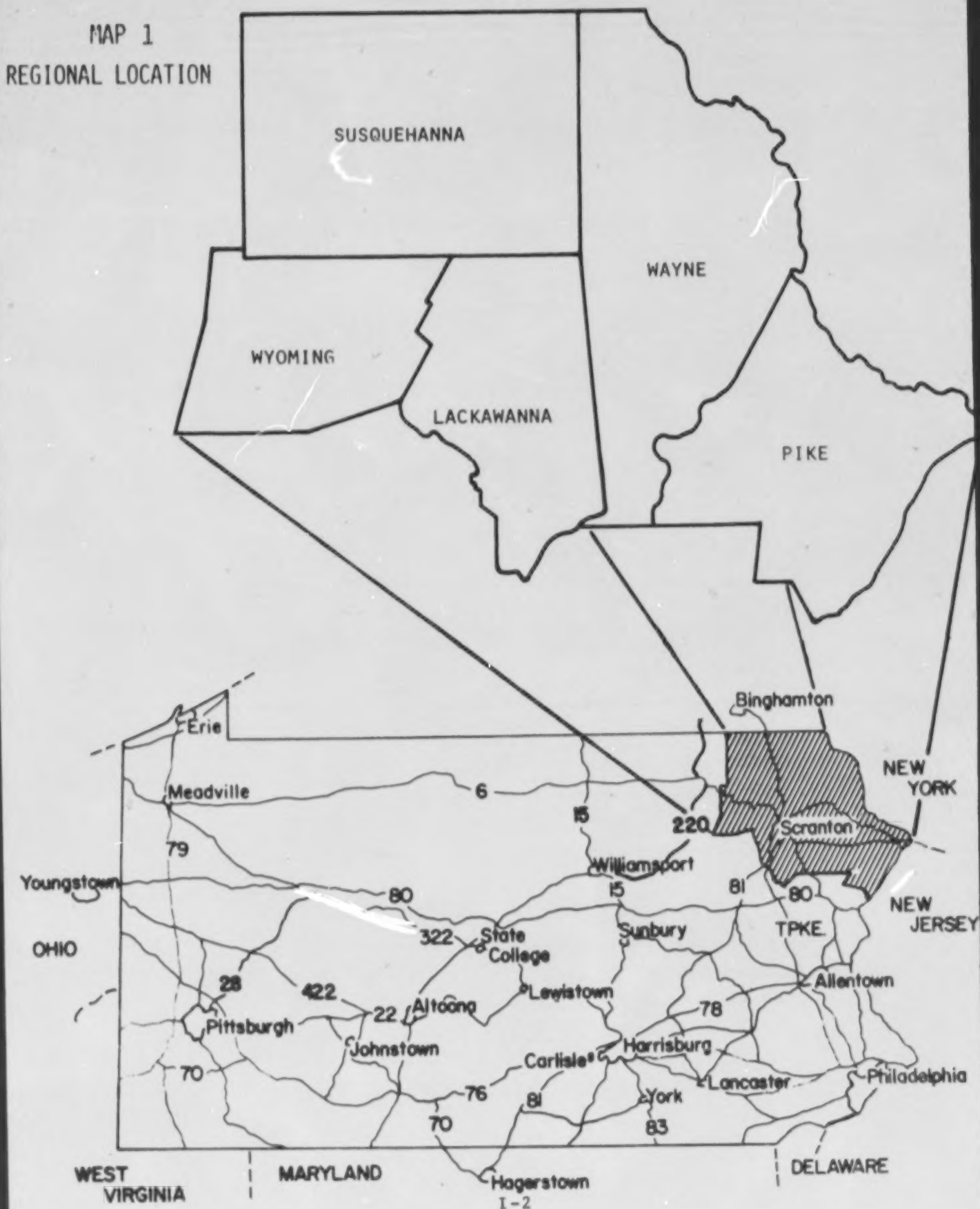
The Northeastern Pennsylvania Region comprises the five counties of Lackawanna, Pike, Susquehanna, Wayne and Wyoming. As the Regional Location map indicates, this includes the entire northeastern corner of Pennsylvania.

The Region has a unique blend of both natural and social features. Three distinct natural areas are found within the Region. Susquehanna and Wayne Counties and a part of Lackawanna County are in the glaciated Low Plateau section of the Appalachian Plateau while Wyoming County and western Lackawanna County is more mountainous and is part of the Appalachian Mountain section and Pike County along with a third portion of Lackawanna County is included in the Pocono Mountain section of the Appalachian Plateau. The terrain throughout the Region varies from gently rolling hills with numerous lakes to high, forested plateaus and steeply sloped mountains.

The natural terrain has had a marked influence on development of cities and towns. The city of Scranton is the only major urban center in the Region and is the fourth largest city in Pennsylvania. It is located in the Wyoming Valley at the eastern edge of the Applachian Mountain section of the Plateau. Beyond the greater Scranton area, there is only scattered settlement of relatively low density. This is particularly true in the heavily forested portions of Wyoming and Pike Counties.

Scranton, near the center of the Region, is at the junction of several major highways. The cities of New York, Harrisburg, Philadelphia and Syracuse are all just slightly over 100 miles away via Interstate Highways. In addition, the Wilkes-Barre Hazleton Standard Metropolitan Statistical Area (SMSA) adjoins Lackawanna County and has over 342,000 persons within its boundaries.

MAP 1
REGIONAL LOCATION



I-2

POPULATION CHARACTERISTICS

The population characteristics of the Northeastern Pennsylvania Region vary somewhat among the five counties although there are some relationships which may be stated. The two counties in the western portion of the Region, Susquehanna and Wyoming, are the only two which have a median age below that for all of Pennsylvania (see Map 2). The other three counties have a median age of the population which is substantially above that of the State.

Table 1 lists the percentage of the total population for each county in the three age groups which would be the most significant contributors to attendance at a community college. The percentage for the entire State are also shown for comparison purposes. The numbers below each percentage indicate the actual count for the 1970 census. The actual numbers of youth or adults which may be expected to attend cannot be reliably predicted solely from census information. These are discussed in the analysis of the survey results.

It is noteworthy that every County in the Region has a lower proportion of its population in the 15 - 24 age group than Pennsylvania as a whole. This may generally be taken as an indication of the "holding power" of an area and shows here that the mobility of young persons just out of high school has affected the makeup of the Region's population.

Map 3 illustrates projections of population change up to 1990 as prepared by the Pennsylvania Department of Education. It can be seen that the rate of persons moving out of Lackawanna and Wayne Counties is expected to be greater than the rate of those moving in plus the natural increase resulting from births exceeding deaths. This "net out-migration" is also expected to occur in Susquehanna County, although not at such a rate as to cause a loss in population. Wyoming and Pike Counties, on the other hand, are projected to experience an in-migration in addition to

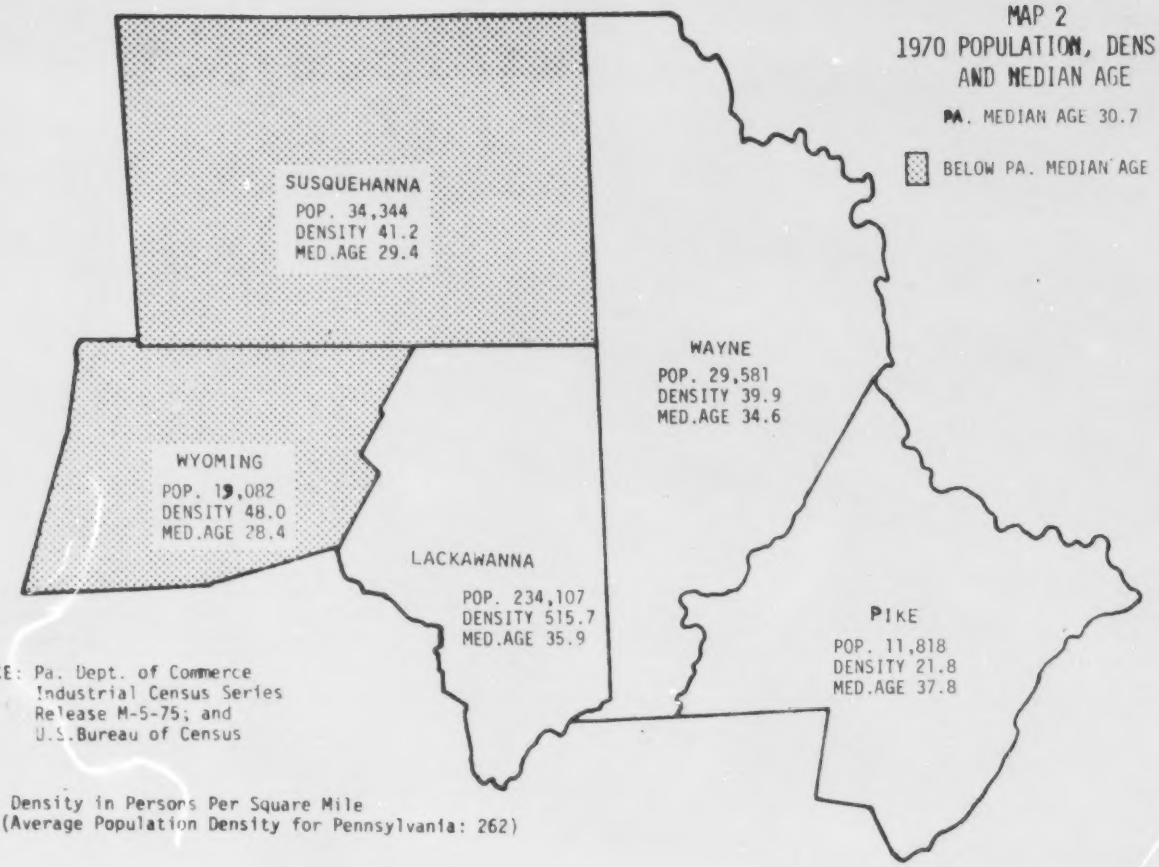
TABLE 1

PERCENTAGE OF TOTAL POPULATION IN PRIMARY AGE GROUPS

Age	COUNTY					State of Pennsylvania
	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	
15 - 24	15.3	12.1	14.6	13.4	15.7	16.3
	(35,818)	(1,430)	(5,014)	(3,964)	(2,995)	
25 - 34	9.7	10.3	11.7	10.2	12.3	11.2
	(22,708)	(1,217)	(4,018)	(3,017)	(2,347)	
35 - 54	29.9	22.8	22.2	23.7	21.8	24.4
	(69,998)	(2,695)	(7,624)	(7,010)	(4,160)	

Source: 1970 U.S. Census of Population and LGR

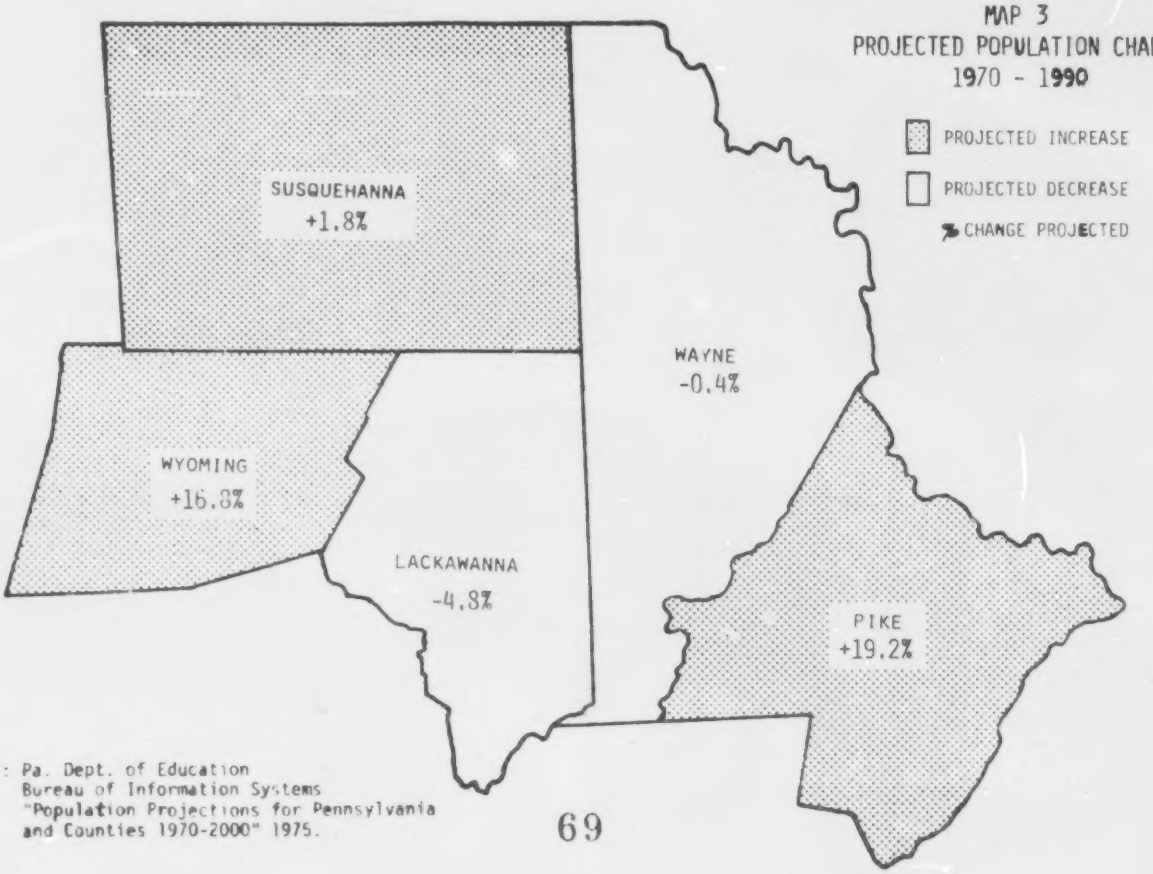
MAP 2
1970 POPULATION, DENSITY, AND MEDIAN AGE



SOURCE: Pa. Dept. of Commerce
Industrial Census Series
Release M-5-75; and
U.S.Bureau of Census

NOTE: Density in Persons Per Square Mile
(Average Population Density for Pennsylvania: 262)

MAP 3
PROJECTED POPULATION CHANGE 1970 - 1990

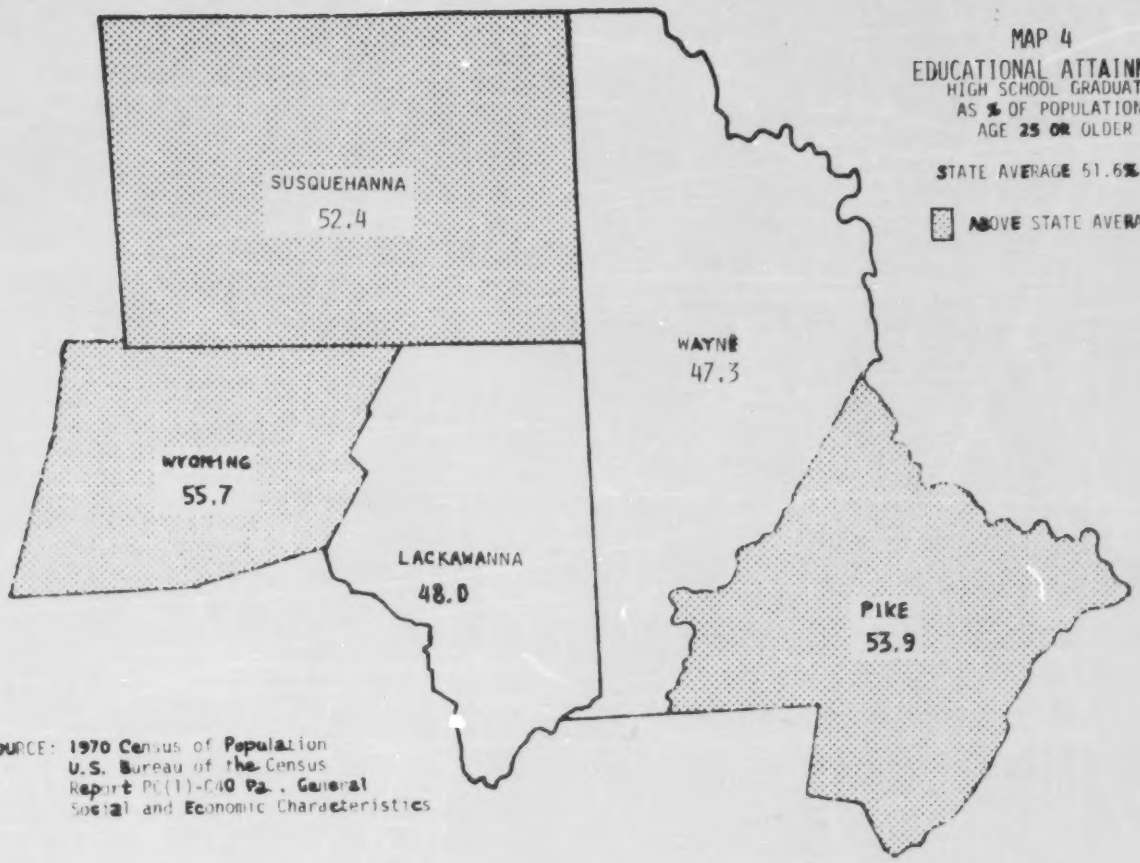


SOURCE: Pa. Dept. of Education
Bureau of Information Systems
"Population Projections for Pennsylvania and Counties 1970-2000" 1975.

population growth through natural increase. The result of these trends can be expected to involve an increase in the median age for Lackawanna and Wayne Counties to a figure even further above the Pennsylvania number. Furthermore, if the population increase in Pike and Wyoming Counties is as great as predicted, there will be a significant drop in the median age of both counties. An increase or decrease in population because of significant migration will likely have a corresponding effect upon the percentage of the total population represented in the 15 - 24 and the 25 - 34 age groups.

The educational attainment of the persons over 25 years of age is illustrated for each of the five counties of the Region in Maps 4 and 5. What is probably more significant than the departure above or below the State average is the spread between the high and low counties in the Region. There is a spread of more than eight percentage points between the proportion of the persons over 25 in Wayne County and the same age group in Wyoming County. The same type of relationship holds true, although to a lesser degree, in terms of the proportions who have attended college. It is interesting to note that the proportion of those adults who expressed a definite interest in a community college was highest in this survey in Wayne County and lowest in Wyoming County.

The current expenditures (not including debt service) per pupil in the public schools in each of the five counties is shown in Map 6. These figures are for the 1974-1975 school year and show a variation among the counties for that particular year. The actual dollars per pupil differ by $270 between Wyoming and Pike Counties. Said another way: the Wyoming County schools would have to increase their total current expenditures by more than $1,000,000 to equal the per pupil expenditures of Pike County. However, figures for one year do not constitute a trend. Furthermore, the difference does not necessarily relate directly to the quality of education being provided.

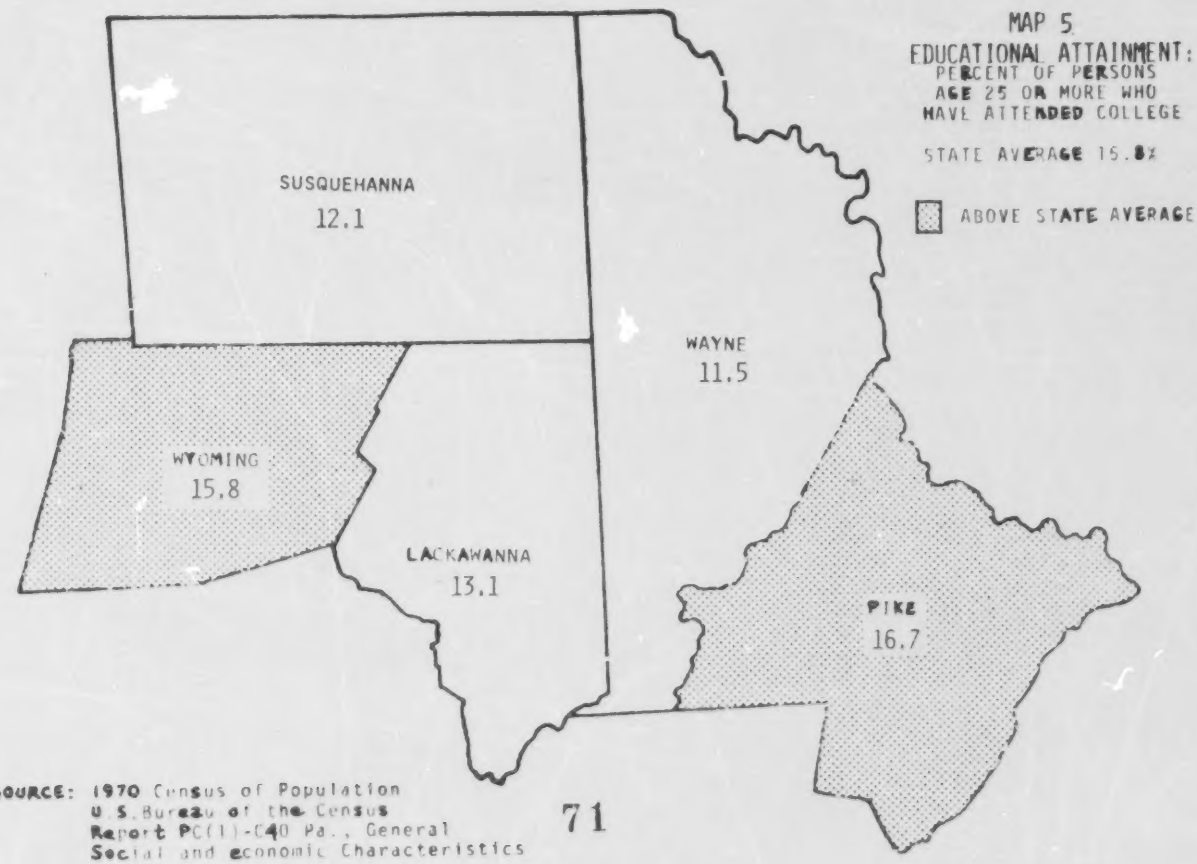


MAP 4
EDUCATIONAL ATTAINMENT
HIGH SCHOOL GRADUATES
AS % OF POPULATION
AGE 25 OR OLDER

STATE AVERAGE 51.6%

ABOVE STATE AVERAGE

SOURCE: 1970 Census of Population
U.S. Bureau of the Census
Report PC(1)-C40 Pa., General
Social and Economic Characteristics



MAP 5
EDUCATIONAL ATTAINMENT:
PERCENT OF PERSONS
AGE 25 OR MORE WHO
HAVE ATTENDED COLLEGE

STATE AVERAGE 15.8%

ABOVE STATE AVERAGE

SOURCE: 1970 Census of Population
U.S. Bureau of the Census
Report PC(1)-C40 Pa., General
Social and economic Characteristics

THE ECONOMY

The 1973 estimated per capita income in each of the counties of the Region is below the Pennsylvania average. This difference is significant in all but Pike County where the County per capita income of $4,886 closely approaches the average of $5,010 for the State.

The Economic Development Council of Northeastern Pennsylvania includes all of the counties included in this study except Wyoming and Susquehanna and with the addition of Carbon, Monroe and Schuylkill.

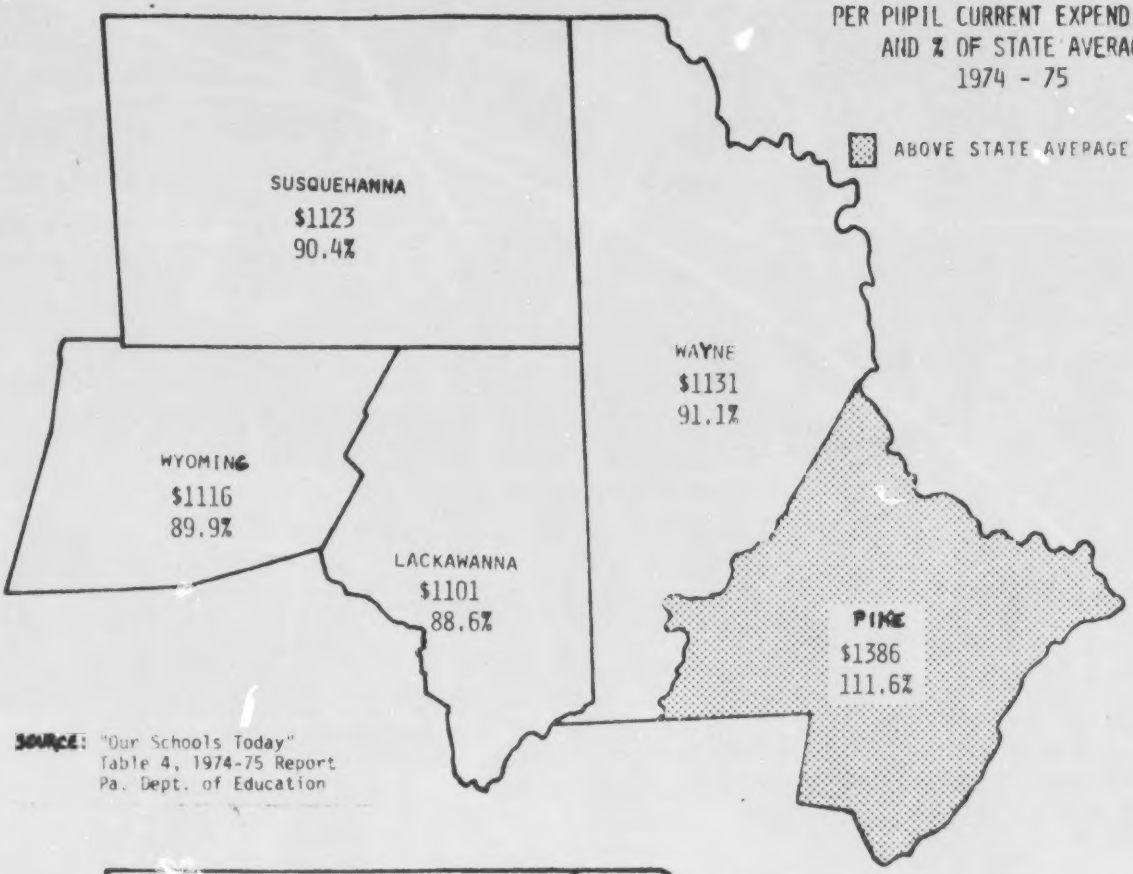
A report on the economy of this seven-county region,* which should not be dissimilar to the five-county region of this feasibility study, provides the following breakdown of employment categories, showing the percentage of the total labor force employed in each category in 1975.

Category	Percent
Operatives	32.9
Craftsmen, Foremen & Kindred	15.1
Clerical	13.2
Professional	10.2
Service	10.2
Sales Workers	6.2
Managers & Administrative	5.9
Laborers (except Farm Workers)	4.6
Farm Workers	1.1
Private Household Workers	0.6

Statistics obtained from Industrial Census Series Reports of the Pennsylvania Department of Commerce provide information on the most

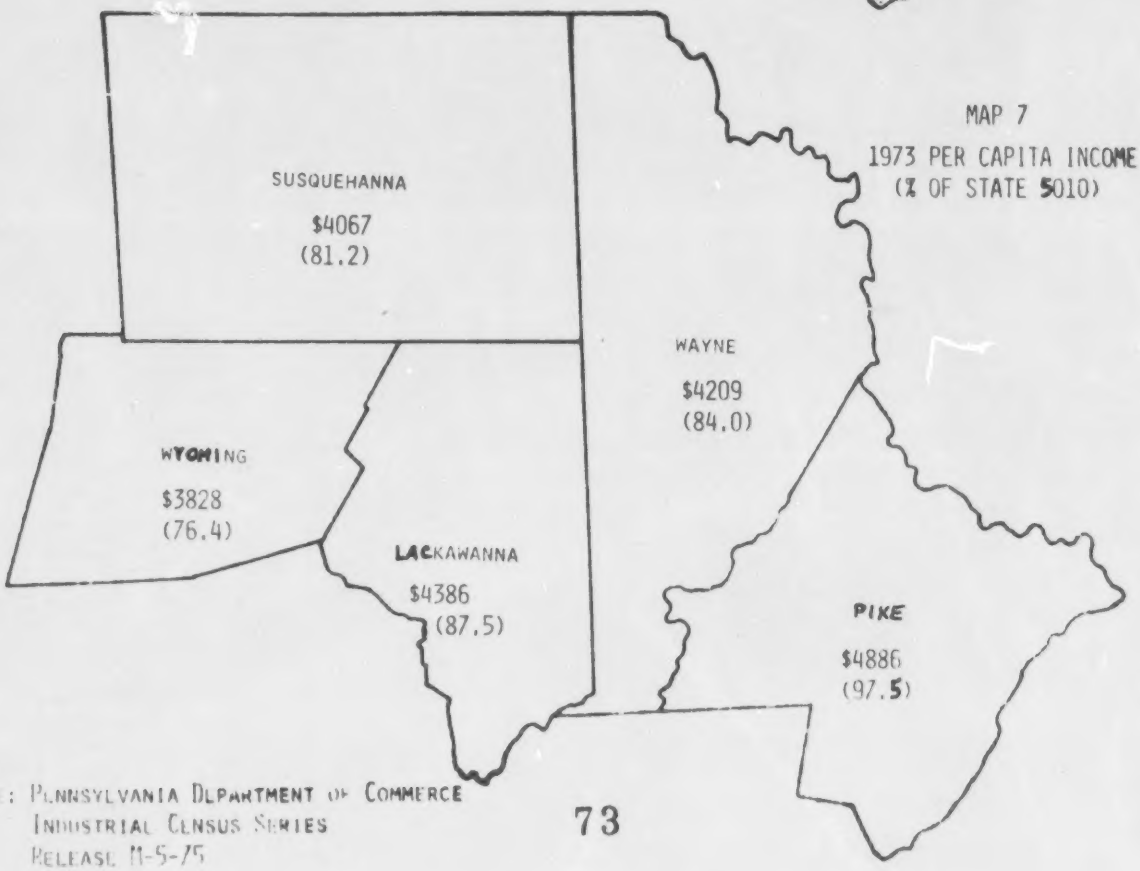
*"Economic Indicators of Northeastern Pennsylvania, 1957-1975", Avoca, Pennsylvania, April, 1976.

MAP 6
PER PUPIL CURRENT EXPENDITURES
AND % OF STATE AVERAGE
1974 - 75



SOURCE: "Our Schools Today"
Table 4, 1974-75 Report
Pa. Dept. of Education

MAP 7
1973 PER CAPITA INCOME
(% OF STATE $010)



SOURCE: PENNSYLVANIA DEPARTMENT OF COMMERCE
INDUSTRIAL CENSUS SERIES
RELEASE 11-5-75

significant manufacturing employers in each of the five counties. The three industry groups which employ the greatest proportion of workers in each county are presented below:

Lackawanna

- Apparel
- Fabricated Metal Products
- Electrical and Electrical Machinery

Wayne

- Apparel
- Printing & Publishing
- Furniture & Fixtures

Pike

- Motor Vehicle Parts
- Food Processing
- Apparel

Wyoming

- Paper Products
- Apparel
- Food Products

Susquehanna

- Aircraft Parts
- Apparel
- Machinery except Electrical

If actual totals are calculated, the three most significant employers in the Region are the apparel industry, various machinery assembly operations and the food industry. The dominance of the apparel industry can be seen in Table 2 showing the total labor force for each county and the number and percentage employed by the apparel industry.

TABLE 2

EMPLOYMENT BY THE APPAREL INDUSTRY - (1974)

County	Total Manufacturing Employees	Number of Apparel Employees	Percent of Total
Lackawanna	28,247	8,455	29.9
Pike	313	28	8.9
Susquehanna	2,148	528	24.6
Wayne	2,171	1,425	65.6
Wyoming	3,149	394	12.5
TOTALS	36,028	10,830	30.1

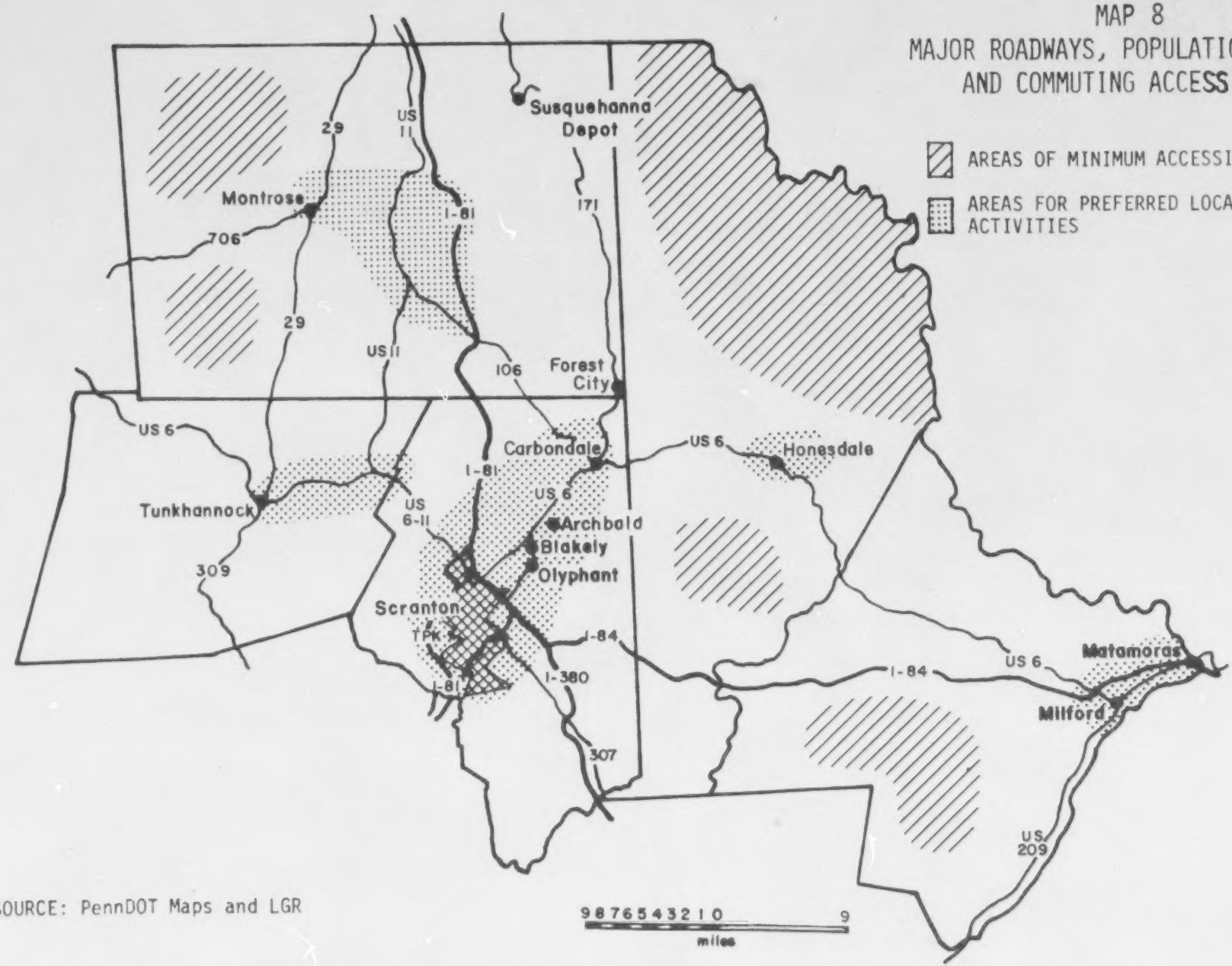
Source: Pennsylvania Department of Commerce, Industrial Census Reports, Series M - 5 - 74.

Reports such as the one previously cited by the Economic Development Council of Northeastern Pennsylvania point out the fact that the Region previously had a heavy dependency upon the coal industry which hurt it considerably over the past decades when coal declined in importance. Although this trend is now reversing. and the Region has managed to increase the diversity of its industrial employment base, the fact that there is an obviously heavy reliance upon the "needle industry" has tended to keep many wages lower than they might be in other industries. Further efforts in attracting other types of employers will be significant in the future economic strength of the entire area.

THE TRANSPORTATION NETWORK

Several major highways converge in or near Scranton to provide the Region with substantial transportation facilities. These include Interstates 81, 84, and 380, the Pennsylvania Turnpike Northeast Extension and U.S. Routes 6 and 11. Map 8 illustrates the major population centers and the areas which are best served by roads and would enable residents from most parts of the Region to reach them with relative ease. The map also illustrates five areas in Susquehanna, Wayne and Pike Counties which are not easily accessible. These areas present disadvantages in terms of locating any potential classes in them, but low densities of population would indicate other choices regardless of the road facilities.

MAP 8
MAJOR ROADWAYS, POPULATION CENTERS, AND COMMUTING ACCESSIBILITY



SOURCE: PennDOT Maps and LGR

APPENDIX II

INFORMATION BROCHURE

(COPIES OF THIS BROCHURE WERE WIDELY DISTRIBUTED AMONG SCHOOLS, LIBRARIES, MUNICIPALITIES, ORGANIZATIONS, AND OTHER OUTLETS.)

PROJECT "ACCESS"
ALTERNATE COMMUNITY COLLEGE EDUCATION SYSTEM STUDY
(NORTHEASTERN PENNSYLVANIA)

THE HOW AND WHY OF COMMUNITY COLLEGE INSTRUCTIONAL SERVICES IN NORTHEAST PENNSYLVANIA

Programs of two-year education beyond high school consist of learning opportunities which can lead to personal or cultural improvements, to a two-year certificate or associate degree in a career field, or which may constitute the first two years of a baccalaureate degree program to be completed at a four-year institution. Postsecondary education in Pennsylvania is delivered through community colleges, state-owned and state related colleges and universities, private four-year colleges, junior colleges, technical institutes, and other institutions.

In Pennsylvania, the Community College Act of 1963 provides the legal basis for a county or a school district or a combination of any number of these two to sponsor education beyond high school at the level of the first two years of college as may be needed by the citizens of the community. It is the intent of the law that all residents of Pennsylvania shall have access to comprehensive postsecondary educational programs which meet the needs of the youth and adults of the community.

In the academic year 1975-76, Pennsylvania's community colleges offered a total of 111 different educational programs leading to certificates, diplomas, or degrees. By no means do all colleges provide all programs; but they offer vocational programs identified as needed and given on a full-time or part-time basis.

HOW CAN COMMUNITY COLLEGE POSTSECONDARY EDUCATION BE PROVIDED IN OUR AREA?

Because of the high cost of land, building construction and maintenance, the State Board of Education has authorized the establishment of community colleges "without walls", meaning that no buildings will be constructed and taxes need not be raised for this purpose. Rather, existing facilities would be used such as classrooms, laboratories, libraries, lecture halls; they would be rented from existing private and public educational institutions. Contracts would be made with such institutions to provide not only facilities, but also teachers and the required courses of instruction.

WHAT PROGRAMS COULD BE OFFERED?

The programs which can be offered are determined largely by the specific needs of the local area and the availability of faculty, space and other facilities which may be requireed. For example, most community colleges in Pennsylvania offer:

-- Vocational programs of two-year duration or less, some of which result in an Associate Degree;

-- The first two years of a baccalaureate program through which a student can transfer to a four-year institution to complete his college education;

-- Opportunities for residents to take a variety of courses of interest for their own self-improvement or job advancement;

-- Special training and education tailored to meet specific industrial, business and other employment needs.

WHO PAYS FOR THESE SERVICES?

Funds to pay for operating costs, instructors, rent of space, contracts with other institutions and to administer the college program come from these basic sources:

-- The Commonwealth of Pennsylvania will pay up to one-third of the cost not to exceed a payment of $500 per student; for students in certain vocational education programs, the Commonwealth will pay an additional amount up to $150 per student per year;

-- Appropriations by local sponsors, in this case the participating counties will account for up to one-third;

-- Tuition charged to students can cover up to one-third of the operating costs;

-- Gifts, grants, and financial support which are often received from foundations, federal, state, and corporate sources.

WHAT DOES IT COST TO BE A STUDENT?

Expected tuition costs will be one of the results of the current feasibility study, as will a determination of what, if any, programs are desired by local area residents. Typically, tuition costs to a student at community colleges elsewhere in Pennsylvania vary from $200 to $288 per semester for a full-time student. Part-time costs average about $21 per credit hour. This relatively low cost is possible because of State financial assistance and because the concept of a "college without walls" avoids large capital expenditure.

A wide range of financial assistance opportunities is also available from such sources as PHEAA, Basic Education Opportunities Grants, the National Defense Student Loan Program, the G.I. Bill, Nursing Education Act Loans, and others.

WHAT ARE THE ADMISSIONS REQUIREMENTS?

The State Board of Education provides for an "open-door" admissions policy. Admission to a specific curriculum in some cases will depend on evidence of required preparatory courses taken either in high school or in the community college itself. Some programs are open to persons with or without previous high school graduation. Developmental programs are made available for those students who require special preparation before admission to some of the established curricula.

Because community college programs are supported in part by local funds, they are aimed at the residents of the sponsoring counties. Persons from outside the sponsoring counties may enroll but must pay a higher tuition.

WHO OPERATES A "COLLEGE WITHOUT WALLS"?

The sponsor can be one or more county governments as is the case in many Pennsylvania community colleges. The County Commissioners appoint a Board of Trustees from among the local residents who will serve without pay and be responsible for the operation of the college. The duties of the Board include appointing a president and other administrators, providing funds and supplies, and, in the case of a "college without walls", to negotiate contracts with existing institutions which will provide the educational programs, the qualified teachers, the library services, professional counseling, laboratories, and other instructional facilities.

A feasibility study to determine whether the need for community college programs exists in the Lackawanna, Pike, Susquehanna, Wayne and Wyoming Counties is currently being conducted under the sponsorship of the Northeastern Pennsylvania Regional Planning Council for Higher Education.

An opinion survey is part of the study, and you are invited to express your views on survey forms which will be available through schools, newspapers, libraries, courthouses and other sources. For further information, call the ACCESS Project Coordinator at (717) 961-4311.

APPENDIX III

SURVEY FORMS

STUDENT OPINION SURVEY

ALTERNATIVE COMMUNITY COLLEGE EDUCATION SYSTEM STUDY (ACCESS)

This is part of a survey being conducted to learn more of the future educational and work plans of high school students in the northeastern Pennsylvania area. The results will be used to help determine whether a need exists for a Community College to serve the area.

1. YOUR NAME (optional) _____

2. Name of your school _____

3. (circle) male (1) female (2)

4. (circle) grade: 10 (1) 11 (2) 12 (3)

5. Circle the county in which you live: Lackawanna (1) Pike (2) Susquehanna (3) Wayne (4) Wyoming (5) Other (6)

6. In what course of study are you presently enrolled?

1 _____ Business or Commercial
2 _____ College Preparatory
3 _____ Vocational Trades
4 _____ Vocational Homemaking
5 _____ Vocational Agriculture
6 _____ General
7 _____ Other (specify on line below)
_____

7. What do you estimate your overall grade average to be?

_____ A (1) _____ B (2) _____ C (3) _____ D (4) _____ Below D (5)

8. Are you planning to continue your formal education after graduation from high school?

1 _____ Yes 2 _____ Undecided 3 _____ No

9. If you answered YES or UNDECIDED in question # 8, please check the kind of educational institution which you have in mind.

1 ___ State College or University
2 ___ State-related College or University
3 ___ Private 4-year College or University
4 ___ Trade or Technical School
5 ___ Junior College
6 ___ Business School
7 ___ Nursing School
8 ___ Other _____

10. If you answered NO in question # 8 please check the one or more reasons from the list below.

1 ___ Want to get a full time job
2 ___ Parents don't want me to
3 ___ Not confident
4 ___ Want to get married
5 ___ Can't afford it
6 ___ Plan to enter an apprenticeship
7 ___ Entering armed services
8 ___ Tired of school
9 ___ Other reasons

(over)

11. If Community College or Technical Institute programs were available to you within a reasonable commuting distance in the northeastern Pennsylvania area with a cost to the student of approximately $500 per year, would you plan to attend?

____1 Yes ____2 Probably ____3 Probably Not ____4 No

12. If you answer to Question # 11 is Yes or Probably, please check ONE or MORE of the reasons why below:

____1 Can live at home.
____2 Can keep job and attend.
____3 Low Cost
____4 My help needed at home.
____5 Can improve scholastic record.
____6 Be near present friends.
____7 Other _____

13. If your answer to Question # 11 is Yes or Probably, which one of the programs below would you most likely choose?

____1 College transfer such as Liberal Arts and Sciences
____2 Technical Training such as Drafting, Electronics, Data Processing, etc.
____3 Two-year Professional Career Training such as Nursing, Dental or Medical Technology, Legal or Medical Secretary, etc.

14. What vocation (employment) have you considered entering when you complete further education or training? EACH RESPONDENT MARK ONLY ONE.

Applied Arts

1 _____ Commercial Art
2 _____ Creative Writing
3 _____ Entertainment
4 _____ Food Services
5 _____ Interior Design
6 _____ Journalism
7 _____ Photography
8 _____ Radio-TV Production
9 _____ Other _____

Human and Public Services

10 _____ Child Care & Guidance
11 _____ Clergy & Ministerial Services
12 _____ Lawyer
13 _____ Police and Fireman
14 _____ Social Work
15 _____ Teaching
16 _____ Other _____

Business

17 _____ Accounting
18 _____ Advertising
19 _____ Agriculture
20 _____ Banking
21 _____ Data Processing
22 _____ Hotel/Motel/Restaurant Mgt.
23 _____ Insurance
24 _____ Marketing
25 _____ Real Estate
26 _____ Secretarial Science
27 _____ Other _____

Construction and Industrial Arts

28 _____ Assembly Worker
29 _____ Automotive Maintenance
30 _____ Building Construction
31 _____ Electrician
32 _____ Equipment Operator
33 _____ Machine Operator
34 _____ Plumber
35 _____ Welder
36 _____ Other _____

Engineering, Science Technology

37 _____ Architecture
38 _____ Drafting/Desing
39 _____ Electronics Technician
40 _____ Engineering
41 _____ Forestry/Wildlife Management
42 _____ Science
43 _____ Other _____

Health Services

44 _____ Doctor/Dentist
45 _____ Health Services Administrator
46 _____ Medical/Dental Assistant
47 _____ Nurse LPN
48 _____ Nurse RN
49 _____ Other _____

Other

50 _____ Armed Forces
51 _____ Barber/Beautician
52 _____ Librarian
53 _____ Mortuary Science
54 _____ Other _____
55 _____ Undecided

ADULT OPINION SURVEY

ALTERNATIVE COMMUNITY COLLEGE EDUCATION SYSTEM STUDY (ACCESS)

This is part of a survey being conducted to help your county officials, education administrators and the Pennsylvania Department of Education to determine the amount and kind of need for a Community College/Technical Institute which might serve the residents of Lackawanna, Pike, Susquehanna, Wayne and Wyoming Counties. If a need is evident, and if such a community college program is established, it would utilize existing facilities and no buildings would be built. The educational programs would be offered at various points of the local area. Financing would be through local funds, state and federal funds, and tuition fees.

Your cooperation in answering the questions below is respectfully requested. You need not fill in your name. You are asked to express your opinion as to the need in general, as well as to indicate whether you might personally take advantage of the educational programs.

Please have your child return the completed form to his or her Homeroom Teacher.

Your Name (optional)_____ 1. Sex: Male___(1) Female___(2)

2. Are you a parent of a school age child? ___(1) Yes ___(2) No

3. Name of the school district in which you live:_____

4. Circle the County in which you live:

Lackawanna (1) Pike (2) Susquehanna (3)
Wayne (4) Wyoming (5) Other (6)

5. Have you completed high school? ___(1) Yes ___(2) No

If you have attended college, how many years did you complete? _____

6. Is there a need for community college/technical institute programs in your local area?

___(1) Yes ___(2) No ___(3) Uncertain

7. If Community College or Technical Institute programs were available to you within a reasonable commuting distance with a student charge of approximately $29 per credit, would you plan to attend?

___(1) Yes ___(2) Probably
___(3) Probably Not ___(4) No

8. If you answered Yes or Probably to question # 7, would you like to enroll in:

1_____ PART-TIME EVENING

2_____ PART-TIME DAY

3_____ FULL-TIME

(Over)

9. In what area of study are you most interested?

1_____ A program which would be transferable to a full four-year college with the objective of a baccalaurate degree.

2_____ An associate degree program in general education studies.

3_____ An associate degree program in technical studies which would prepare you for specific employment (such as nursing, dental or medical technology, legal or medical secretary, technical electronics, tool and die making, etc.

4_____ A vocational or occupational training program leading to a certificate of completion (such as drafting, automotive mechanics, welding, etc.)

5_____ A program for personal or cultural improvement.

10. If you answered question # 9 what vocational or employment area would you hope to pursue through additional education?

Each Respondent Mark Only One

Applied Arts

1_____ Commercial Art
2_____ Creative Writing
3_____ Entertainment
4_____ Food Services
5_____ Interior Design
6_____ Journalism
7_____ Photography
8_____ Radio-TV Production
9_____ Other_____

Human and Public Services

10_____ Child Care & Guidance
11_____ Clergy & Ministerial Services
12_____ Lawyer
13_____ Police and Fireman
14_____ Social Work
15_____ Teaching
16_____ Other_____

Business

17_____ Accounting
18_____ Advertising
19_____ Agriculture
20_____ Banking
21_____ Data Processing
22_____ Hotel/Motel/Restaurant Mgt.
23_____ Insurance
24_____ Marketing
25_____ Real Estate
26_____ Secretarial Science
27_____ Other_____

Construction and Industrial Arts

28_____ Assembly Worker
29_____ Automotive Maintenance
30_____ Building Construction
31_____ Electrician
32_____ Equipment Operator
33_____ Machine Operator
34_____ Plumber
35_____ Welder
36_____ Other _____

Engineering, Science Technology

37_____ Architecture
38_____ Drafting/Design
39_____ Electronics Technician
40_____ Engineering
41_____ Forestry/Wildlife Management
42_____ Science
43_____ Other _____

Health Services

44_____ Doctor/Dentist
45_____ Health Services Administrator
46_____ Medical/Dental Assistant
47_____ Nurse LPN
48_____ Nurse RN
49_____ Other _____

Other

50_____ Armed Forces
51_____ Barber/Beautician
52_____ Librarian
53_____ Mortuary Science
54_____ Other _____
55_____ Undecided

PROFESSIONAL NEEDS SURVEY

ALTERNATIVE COMMUNITY COLLEGE EDUCATION SYSTEM STUDY (ACCESS)

This is part of a survey being made to help determine whether there is a need for a two-year Community College or Technical Institute "without walls" in the Lackawanna, Pike, Susquehanna, Wayne and Wyoming County area. Its purpose is to secure information on the requirements of the professions for trained people; and the type of training and education that will best prepare them for these positions. The information you give us will be kept confidential. Neither your firm or specific information regarding it will be identified in any way in the reports. If you would prefer to omit the name of the person completing the questionnaire, please feel free to do so. Your cooperation in answering this questionnaire is appreciated.

Profession_____ Date_____

Location_____

Name and Title (if any) of Person Reporting_____

1. What is the total number of employees in your organization?

____1-3 ___4-6 ___7-10 ___11-15 ___16 or over

2. In your professional field, is there a need for two-year community college-trained personnel? _____Yes _____No

3. Are your present needs for such personnel served by existing postsecondary educational facilities in the area? _____ Yes _____No

4. If a two-year community college offering occupational programs in your field were established in the area, do you feel you would have a need for its graduates?

_____Yes _____No

5. What specific type(s) of occupational training program(s) would be desirable to your profession? (Indicate all which would be of use.)

_____Accounting
_____Commercial Broadcasting
_____Data Processing
_____Dental Assistant
_____Dental Hygienist
_____Drafting
_____Economics & Government
_____Electronics Technology
_____Engineering Technology
_____Executive Secretarial
_____
_____

_____General Business
_____General Secretarial
_____Health & Welfare Services
_____Legal Secretarial
_____Medical Lab Technician
_____Medical Secretarial
_____Nursing
_____Offset Printing
_____Photographic Processes
_____Physical Therapy
_____Technical Writing
_____

6. If a two-year community college were established in your area would you consider yourself a potential resource for the part-time instructional staff?

_____Yes _____No _____Undecided

PLEASE RETURN THE COMPLETED QUESTIONNAIRE TO:

ATTITUDE SURVEY
P.O. Box 768
STATE COLLEGE, PA 16801

BUSINESS - INDUSTRY SURVEY

ALTERNATIVE COMMUNITY COLLEGE EDUCATION SYSTEM STUDY (ACCESS)

This survey is being made to help determine whether there is a need for a two-year Community College or Technical Institute "without walls" to serve the Lackawanna, Pike, Susquehanna, Wayne and Wyoming County area. Its purpose is to secure information on the requirements of business, industry, and community services for trained people; and the type of training and education that will best prepare them for these positions. The information you give us will be kept confidential. Neither your firm nor specific information regarding it will be identified in any way in the reports. If you would prefer to omit the names of the business and the person completing the questionnaire, please feel free to do so. Your cooperation in answering this questionnaire will be appreciated.

Name of Business or Industry _____ Date _____

Type of Business or Industry _____

Name and Title of Person Reporting _____

1. What is your average number of regular employees? _____

2. Approximately what percentage of your employees are in jobs that require training beyond the high school level, but less than the bachelor's degree?

   ___None ___1%-20% ___21%-40% ___41%-60% ___61%-80% ___81%-100%

3. Do you expect to have employment opportunities in your organization for people with two years of technical or semi-professional training beyond high school?

   _____Yes _____No

4. Do you expect your organization's need for employees with education beyond high school to increase during the next ten years? _____Yes _____No

5. Could employees with two years of technical training beyond high school perform some of your organization's technical-level work, thereby permitting your college graduates to spend more of their time on professional-level work? ___Yes ___No

6. If an opportunity were available, approximately what percentage of your present employees do you feel would like to obtain schooling beyond high school, but not necessarily at the bachelor's degree level?

   ____Up to 25% ____25% to 50% ____50% to 75% ____Over 75%

7. How well do existing postsecondary educational facilities in the area meet the needs of your organization for employees at less than the college graduate level?

   _____Very Well _____Fairly Well _____Inadequately

8. Does your organization have a formal in-company educational training program for less than college graduate level employees? _____Yes _____No

9. Do you feel that two years of community college-level training provided in the area would be a helpful supplement to your existing training program?

   _____Yes _____No

(over)

10. Would your organization or business be willing to accept students under a cooperative education-work plan to provide them with occupational and/or career experience?

_____Yes _____Don't Know _____No

11. Would two years of community college training be recognized by your organization specifically for:

____Hiring qualified personnel ____Job advancement. ____Higher pay.

____None of the Above ____Other (specify)_____

12. What would be your organization's attitude toward the establishment of an institution in your area offering both (1) two-year programs of training; and (2) two-year programs of liberal arts, transferable to a four-year college or university?

____Very Favorable ____Favorable ____Undecided ____Unfavorable

13. Please mark the types of training that would be of value to your organization, if provided by a community college program.

_____Advertising
_____Agriculture
_____Air Conditioning & Refrigeration
_____Applied Mathematics
_____Apprentice Training
_____Banking
_____Bookkeeping & Accounting
_____Building Trades
_____Business Machines
_____Business Management
_____Clerical Practice
_____Computer Technology
_____Data Processing Technician
_____Drafting & Print Reading
_____Electric Wiring & Meters
_____Electronics
_____Engineering Technician
_____English & Speech
_____Industrial Chemistry
_____Instrumentation & Plant Control
_____Inspection & Quality Control
_____Laboratory Technician
_____Labor-Management Relations
_____Law Enforcement & Related
_____Machine Shop Practice
_____Machine Technology
_____Management Development
_____Marketing
_____Mathematics, Theory
_____Mechanics (Auto, Diesel)
_____Metallurgy
_____Photographic Processes
_____Plant Protection
_____Product Design
_____Purchasing
_____Retailing-Merchandising
_____Sales Representative
_____Secretarial
_____Technical Writing & Reporting
_____Welding
_____Other (Specify) _____
_____

PLEASE RETURN THE COMPLETED QUESTIONNAIRE TO:

ATTITUDE SURVEY
P. O. BOX 768
STATE COLLEGE, PA 16801

MEMBERS ASKED TO COMPLETE SURVEY

Last month the Chamber's Board of Directors granted permission to Doctor C. R. Walther Thomas, International Trade Consultant to the Chamber, to print a questionnaire on the Alternative Community College Education Systems Study (ACCESS) in this month's edition of NEWSBRIEFS.

A story on the program, commonly referred to as the "College Without Walls" concept appeared last month. Doctor Thomas is Project Coordinator for the program.

Briefly the purpose of the questionnaire is to determine if the area's businessmen feel there is a need for a "college without walls" in the five-county area of Northeastern Pennsylvania.

This questionnaire will be the first in a series of surveys sent to students, adults, businesses, industry, and professionals, within Lackawanna, Pike, Susquehanna, Wayne, and Wyoming counties.

Each Chamber member is asked to complete the questionnaire and return it to Doctor Thomas in care of the Chamber of Commerce, 426 Mulberry Street, Scranton, PA 18503.

One of the primary purposes of the "College Without Walls" is to provide the opportunity of higher education to men and women unable to attend college right after high school because of financial or academic reasons, and to provide such a college without placing on the taxpayer the cost of buying land and buildings and maintaining a new college campus.

According to Doctor Thomas, response to the questionnaire is vital since past studies have shown that involvement of the business community is vital to the program's success.

Your Name (optional) _____

1. Type of Business _____
2. County in which your firm is located: _____
3. How many people are employed by your firm? _____
4. Approximately what percentage of your employees do you believe need education beyond high school, but at less than the 4-year college degree?
   _____ Up to 20% _____ 20% to 40% _____ 40% to 60% _____ 60% to 80% _____ Over 80%
5. Which of the following five general kinds of education do you believe these employees need? Please identify greatest need with a "1" next most important "2", and so on.
   _____ Reading and writing skills
   _____ Mathematical skills
   _____ Management, communication and interpersonal skills
   _____ Applied arts
   _____ Applied technology
   _____ Other _____
6. In addition to the *general* categories listed above, please list *specific* kinds of training required by your firm below:

   _____ _____

   _____ _____
7. Do you believe that the needs which you have identified above are generally being met in the northeast Pennsylvania area at the present time?
   _____ Yes _____ To a limited extent _____ No
8. Please list below those needs identified in question # 5 and # 6 which you feel are unmet in the northeast Pennsylvania area at the present time.

   _____ _____

   _____ _____
9. Considering the information provided in the *Newsbrief* article last month, would you support the idea of a community college "without walls" to help respond to these needs?
   _____ Yes _____ Not sure _____ No
10. Does your firm have a formal in-company training programs for employees?
    _____ Yes _____ No
11. Do you feel that your firm would support a tuition assistance program for your employees enrolled in job-related community college programs?
    _____ Yes _____ Not sure _____ No
12. Please add your comments.

    _____

    _____

    _____

    _____

APPENDIX IV

DETAILED SURVEY RESPONSES

RESPONSES TO STUDENT SURVEY

The first two questions on the student survey requested the name and school of the student completing the questionnaire.

Question 3: "Sex". The number of males and femals completing the survey is shown below:

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Male	2,942	239	493	604	412	4,890
Female	3,320	246	731	622	388	5,307

Question 4: "Grade Level". The response to this question is shown in the following breakdown by grade and county.

Grade	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
10	2,259	185	530	470	302	3,746
11	2,198	171	490	422	313	3,594
12	2,169	146	452	377	236	3,380

Question 5: "Circle the county in which you live."

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Other
Number of Responses	6,630	502	1,472	1,269	851	14

Question 6: "In what course of study are you presently enrolled?"
The total number of responses for all five counties is:

1,827	Business or Commercial
4,556	College Preparatory
1,110	Vocational Trades
91	Vocational Homemaking
94	Vocational Agriculture
2,504	General
369	Other

Question 7: "What do you estimate your overall grade average to be?"

TOTALS FOR FIVE COUNTIES

1,343	A
5,363	B
3,632	C
261	D
45	Below D

Question 8: "Are you planning to continue your formal education after graduation from high school?"

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Yes	3,585	269	559	529	362	5,304
Undecided	1,772	136	474	399	214	2,995
No	1,264	97	443	338	275	2,407

Question 9: "If you answered "yes" or "undecided" in Question 8, please check the kind of educational institution which you have in mind."

Institution	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
State college or university	2,159	170	312	281	207	3,129
State-related college or university	487	37	92	72	58	746
Private 4-year college or university	602	48	91	84	66	891
Trade or Technical School	909	72	247	234	101	1,563
Junior College	384	28	82	72	57	623
Business School	470	45	133	122	36	806
Nursing School	380	11	71	49	30	541
Other	350	40	101	79	53	623

Question 10: "If you answered "no" in Question 8, please check the one or more reasons from the list below."

Reason	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Want to get full-time job	804	46	255	199	161	1,465
Parents don't want me to	21	0	7	3	8	39
Not Confident	67	6	29	27	17	146
Want to get married	177	18	85	68	46	394
Can't afford it	133	19	84	69	50	355
Plan to enter an apprenticeship	91	4	26	14	14	149
Entering armed services	184	26	95	73	56	434
Tired of school	378	32	137	129	90	766
Other reasons	246	29	109	65	79	528

Question 11: "If Community College or Technical Institute programs were available to you within a reasonable commuting distance in the Northeastern Pennsylvania area with a cost to the student of approximately $500 per year, would you plan to attend?"

School District	Yes	Probably	Uncertain	No
Abington Heights	84	341	276	162
Carbondale Area	60	187	130	80
Dunmore	76	211	151	101
Lakeland	38	121	78	46
Mid Valley	20	145	50	31
North Pocono	57	207	157	142
Old Forge	39	137	90	65
Riverside	48	216	113	85
Scranton	167	647	419	309
Valley View	83	272	173	140
Blue Ridge	54	179	76	67
Elk Lake	27	132	82	62
Forest City	28	73	65	37
Montrose	32	163	155	75
Mountain View	0	0	0	0
Susquehanna	39	117	58	53
Wallenpaupack	40	105	57	44
Wayne Highlands	62	266	163	115
Western Wayne	50	182	109	77
Lackawanna Trail	28	111	86	63
Tunkhannock	44	208	199	181
Delaware Valley	39	120	123	81
Parochial	44	166	110	62
Lackawanna	738	2,710	1,784	1,247
Pike	62	170	54	101
Susquehanna	166	613	398	265
Wayne	139	534	328	238
Wyoming	54	279	256	227

Question 12: "If your answer to Question 11 is "yes" or "probably", please check one or more of the reasons why below:"

Reason	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Can Live at Home	1,947	108	389	345	194	2,993
Can Keep Job and Attend	1,674	140	383	351	176	2,734
Low Cost	1,079	79	342	258	116	1,874
My Help Needed at Home	390	20	108	114	46	678
Can Improve Scholastic Record	469	36	128	84	55	772
Be Near Present Friends	997	53	204	191	93	1,538
Other	123	14	42	22	17	218

Question 13: "If your answer to Question 11 is "yes" or "probably", which one of the programs below would you most likely choose?"

Program	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
College Transfer such as Liberal Arts and Sciences	788	54	141	147	75	1,205
Technical Training such as Drafting, Electronics, Data Processing, etc.	1,164	98	297	275	125	1,959
Two-Year Professional Career Training such as Nursing, Dental or Medical Technology, Legal or Medical Secretary, etc.	1,274	75	308	222	121	2,000

Question 14: "What vocation (employment) have you considered entering when you complete further education or training?"

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Applied Arts						
Commercial Art	168	7	31	21	18	255
Creative Writing	29	0	7	8	3	47
Entertainment	99	10	19	18	14	160
Food Services	61	15	7	18	12	113
Interior Design	80	5	23	23	7	138
Journalism	60	3	17	11	7	98
Photography	117	9	21	12	15	174
Radio-Tv Production	66	3	11	16	6	102
Other	92	13	23	23	13	164
Human and Public Services						
Child Care & Guidance	221	7	40	23	24	315
Clergy & Ministerial Services	10	1	4	1	2	18
Lawyer	165	12	26	21	14	238
Police & Fireman	145	7	39	23	15	229
Social Work	136	11	33	21	14	215
Teaching	171	18	43	32	17	281
Other	87	10	19	25	16	157
Business						
Accounting	241	27	49	46	17	380
Advertising	33	0	2	7	1	43
Agriculture	35	2	28	17	13	95

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Business (Cont'd.)						
Banking	61	2	15	9	1	88
Data Processing	111	3	22	14	8	158
Hotel/Motel/Restaurant Management	40	7	10	14	5	76
Insurance	18	2	1	0	1	22
Marketing	58	4	5	9	1	77
Real Estate	16	2	2	5	2	27
Secretarial Science	232	22	50	44	19	367
Other	119	7	21	17	13	177
Construction and Industrial Arts						
Assembly Worker	31	1	13	5	5	55
Automotive Maintenance	204	21	71	80	36	412
Building Construction	185	18	37	26	17	283
Electrician	141	9	34	22	15	221
Equipment Operator	68	6	39	33	23	169
Machine Operator	93	8	12	21	15	149
Plumber	74	3	6	2	2	87
Welder	48	6	12	12	21	99
Other	119	6	27	19	14	185
Engineering, Science Tech.						
Architecture	82	8	14	11	15	130
Drafting/Design	74	3	14	5	9	105
Electronics Technician	102	3	23	22	7	157
Engineering	118	13	25	26	15	197
Forestry/Wildlife Mgt.	180	21	50	36	25	312
Science	106	14	14	31	17	182
Other	67	8	22	10	10	117

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Health Services						
Doctor/Dentist	213	7	33	31	23	307
Health Services Administrator	28	4	2	6	1	41
Medical/Dental Assistant	148	5	22	15	10	200
Nurse LPN	72	6	14	10	9	111
Nurse RN	277	6	50	31	17	381
Other	263	20	56	43	34	416
Other						
Armed Forces	157	20	58	50	28	313
Barber/Beautician	139	10	34	16	20	219
Librarian	8	1	3	2	0	14
Mortuary Science	10	1	3	3	2	19
Other	87	8	32	24	16	167
Undecided	554	20	82	92	132	880

RESPONSES TO ADULT SURVEY

Question 1: "Sex". The number of males and females completing the survey is shown below:

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total	
Male	1,876	123	303	279	116	2,697	(28%)
Female	4,645	307	746	781	231	6,710	(69%)
TOTALS	6,521	430	1,049	1,060	347	9,407	
	(69%)	(5%)	(11%)	(11%)	(4%)	(100%)	

Question 2: "Are you a parent of a school age child?"

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Yes	6,610	434	1,093	347	347	9,578
No	61	11	26	16	17	131

Question 3: "Name of the school district in which you live:"

District	Number of Respondents
Abington Heights	543
Carbondale	317
Dunmore	405
Lakeland	196
Mid Valley	283
North Pocono	496
Old Forge	343
Riverside	167
Scranton	2,461
Valley View	266
Blue Ridge	268
Elk Lake	189
Forest City	144
Montrose	315
Mountain View	166
Susquehanna	123
Wallenpaupack	645
Wayne Highlands	463
Western Wayne	213
Lackawanna Trail	243
Tunkhannock	208
Delaware Valley	133
Parochial	752

Question 4: "Circle the County in which you live:"

Lackawanna	Pike	Susquehanna	Wayne	Wyoming
6,846	446	1,119	1,110	372

Question 5: "Have you completed high school?"

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Yes	5,714	374	929	948	314	8,279 (84%)
No	1,127	71	188	161	58	1,605 (16%)

"If you have attended college, how many years did you complete?"

Years	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
1	517	33	60	67	23	700
2	488	27	52	65	29	661
3	284	17	31	29	7	368
4	514	38	50	66	25	693
5	77	7	9	19	7	119
6	92	3	9	16	12	132
7	32	0	1	0	2	35
8	23	0	2	1	1	27
9	0	0	0	0	0	0
10	7	1	0	1	2	11

Question 6: "Is there a need for community college/technical institute programs in your local area?"

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Yes	3,728	296	646	747	179	5,593 (58%)
No	689	36	124	64	91	1,004 (10%)
Uncertain	2,166	111	338	289	96	3,000 (31%)

Question 7: "If community college or technical institute programs were available to you within a reasonable commuting distance with a student charge of approximately $20 per credit, would you plan to attend?"

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Yes	1,500	93	282	291	61	2,227 (23%)
Probably	2,007	165	359	336	114	2,981 (31%)
Probably Not	1,511	117	249	270	73	2,220 (23%)
No	1,512	63	195	191	112	2,073 (22%)

Question 8: "If you answered "yes" or "probably" to Question 7, would you enroll in:"

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Part-Time Evening	2,532	189	488	451	123	3,783 (73%)
Part-Time Day	815	66	137	145	42	1,205 (23%)
Full-Time	148	3	29	29	9	218 (4%)

Question 9: "In what area of study are you most interested?"

Area of Study	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
College Transfer	567	28	81	87	22	785 (14%)
Associate Degree Program in General Education Studies	248	10	50	37	0	345 (6%)
Associate Degree Program in Technical Studies	1,516	89	289	292	85	2,271 (39%)
Vocational or Occupational Training Program	653	71	157	137	28	1,046 (18%)
Personal or Cultural Improvement	877	104	132	148	56	1,317 (23%)

Question 10: "If you answered Question 9, what vocational or employment area would you hope to pursue through additional education?"

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Applied Arts						
Commercial Art	106	6	21	10	4	147
Creative Writing	75	9	10	19	4	117
Entertainment	22	2	5	2	1	32
Food Services	84	10	13	21	12	140
Interior Design	158	18	14	20	2	212
Journalism	31	0	4	6	2	43
Photography	43	11	7	11	2	74
Radio-TV Production	41	1	4	6	7	54
Other	28	2	1	3	0	34

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Human & Public Services						
Child Care & Guidance	164	4	26	21	4	219
Clergy & Ministerial Services	10	0	1	7	0	18
Lawyer	14	0	8	5	3	30
Police & Fireman	33	8	3	3	1	48
Social Work	165	4	35	36	5	245
Teaching	104	6	26	25	3	164
Other	13	0	4	8	0	25
Business						
Accounting	164	13	40	41	10	268
Advertising	26	1	3	3	2	35
Agriculture	9	0	9	6	0	24
Banking	25	4	7	10	2	48
Data Processing	91	2	20	13	2	128
Hotel/Motel/Restaurant Mgt.	41	3	8	3	1	56
Insurance	19	0	7	5	3	34
Marketing	52	2	7	5	0	66
Real Estate	81	4	12	11	5	113
Secretarial Science	177	15	36	28	10	266
Other	61	4	10	4	4	83
Construction & Industrial Arts						
Assembly Worker	23	0	4	2	0	29
Automotive Maintenance	71	6	15	19	1	112
Building Construction	94	6	18	19	6	143
Electrician	77	5	21	24	4	131
Equipment Operator	27	4	5	1	2	39
Machine Operator	33	2	9	6	0	50
Plumber	22	4	4	5	1	36
Welder	43	13	13	19	1	89
Other	28	4	4	10	1	47

	Lackawanna	Pike	Susquehanna	Wayne	Wyoming	Total
Engineering, Science Tech.						
Architecture	9	1	4	1	0	15
Drafting/Design	38	2	5	3	2	50
Electronics Technician	61	2	18	16	2	99
Engineering	55	1	7	7	12	82
Forestry/Wildlife Mgt.	54	7	19	10	5	95
Science	26	2	4	1	0	35
Other	18	5	2	5	0	30
Health Services						
Doctor/Dentist	31	1	4	5	0	41
Health Services Admin.	26	1	7	8	0	52
Medical/Dental Asst.	222	16	36	40	20	334
Nurse LPN	284	9	37	39	12	381
Nurse RN	212	12	30	39	10	303
Other	115	4	21	20	0	160
Other						
Armed Forces	5	0	3	1	0	9
Barber/Beautician	97	17	29	14	7	164
Librarian	24	0	6	3	0	33
Mortuary Science	13	0	2	0	0	15
Other	16	5	2	3	3	29
Undecided	289	44	47	51	10	441

BUSINESS AND INDUSTRY SURVEY

Procedure

Five hundred and thirteen (513) questionnaires were sent to business and industries representative of the business and industrial community in the five-county study area. Forty-one (8%) surveys were returned. Nine surveys were completed by telephone.

Summary of Survey

Question 1: "What is your average number of employees?"

4,080	Employees represented by mail survey
4,350	Employees represented by telephone survey
8,430	Total number of employees represented

Range from 1 to 1,500

Question 2: "Approximately what percentage of your employees are in jobs that require training beyond the high school level, but less than the bachelor's degree?"

	Mail Survey	Telephone Survey	Total
None	12 companies		12
1% - 20%	18 companies	8 companies	26
21% - 40%	5 companies	1 company	6
41% - 60%	1 company		1
61% - 80%	1 company		1
81% -100%	3 companies		3
TOTAL	40 companies	9 companies	49

Question 3: "Do you expect to have employment opportunities in your organization for people with two years of technical or semi-professional training beyond high school?"

	Mail	Telephone	Total
Yes	20	6	26 (55%)
No	19	2	21 (45%)

Question 4: "Do you expect your organization's need for employees with education beyond high school to increase during the next ten years?"

Yes	25	(66%)
No	13	(34%)

Question 5: "Could employees with two years of technical training beyond high school perform some of your organization's technical-level owrk, thereby permitting your college graduates to spend more of their time on professional-level work?"

Yes	29	(76%)
No	9	(24%)

Question 6: "If an opportunity were available, approximately what percentage of your present employees do you feel would like to obtain schooling beyond high school, but not necessarily at the bachelor's degree level?"

Up to 25%	25
25% to 50%	2
50% to 75%	
Over 75%	2

Question 7: "How well do existing postsecondary educational facilities in the area meet the needs of your organization for employees at less than the college graduate level?"

Very Well	12	(34%)
Fairly Well	15	(43%)
Inadequately	8	(23%)

Question 8: "Does your organization have a formal in-company educational training program for less than college graduate level employees?"

Yes	8	(22%)
No	28	(78%)

Question 9: "Do you feel that two years of community college-level training provided in the area would be a helpful supplement to your existing training program?"

Yes	20	(61%)
No	13	(39%)

Question 10: "Would your organization or business be willing to accept students under a cooperative education-work plan to provide them with occupational and/or career experience?"

Yes	13	(33%)
No	8	(20%)
Don't Know	19	(48%)

Question 11: "Would two years of community college training be recognized by your organization specifically for:?"

	Mail	Telephone	Total
Hiring Qualified Personnel	22	5	27 (43%)
Job Advancement	14	4	18 (29%)
Higher Pay	6	1	7 (11%)
None of the Above	7	3	10 (16%)
Other	1		1 (2%)

Question 12: "What would be your organization's attitude toward the establishment of an institution in your area offering both (1) two-year programs of training; and (2) two-year programs of liberal arts, transferable to a four-year college or university?"

	Mail	Telephone	Total
Very Favorable	13	1	14 (30%)
Favorable	13	4	17 (37%)
Undecided	9	1	10 (22%)
Unfavorable	2	3	5 (11%)

Question 13: "Please mark the types of training that would be of value to your organization, if provided by a community college program."

	Telephone	Mail
Advertising	1	10
Agriculture		2
Air Conditioning & Refrigeration		4
Applied Mathematics		7
Apprentice Training		5
Banking		1
Bookkeeping & Accounting	3	20
Building Trades		5
Business Machines		5
Business Management		13
Clerical Practice	3	11
Computer Technology		8
Data Processing Technician		4
Drafting & Print Reading	3	8
Electric Wiring & Meters		10
Electronics	1	7
Engineering Technician	1	11
English & Speech	1	3
Industrial Chemistry		3
Instrumentation & Plant Control		4
Inspection & Quality Control	3	10
Laboratory Technician		4
Labor-Management Relations		5
Law Enforcement		1
Machine Shop Practice		9
Machine Technology		8
Management Development		8
Marketing		5
Mathematics, Theory		1
Mechanics (Auto, Diesel)		5
Metallurgy		2
Photographic Processes		4
Plant Protection		2
Product Design	1	5
Purchasing		7
Retailing-Merchandising	2	5
Sales Representative	2	7
Secretarial	2	10
Technical Writing & Reporting		2
Welding		7

The following table represents a summary of the responses to Questions 5, 7, and 12 on the mail survey.

BUSINESS INDUSTRY SURVEY BY NUMBER OF EMPLOYEES

(MAIL SURVEY)

Name of Company	Number of Employees	Question # 5	Question # 7	Question # 12
Under 50 Employees				
	1	No	Very well	Very favorable
	2			
	2		Very well	Very favorable
	3	Yes	Inadequate	Favorable
	4	No	Fairly well	Very favorable
	5	Yes	Fairly well	Favorable
	5	No	Very well	Undecided
	12	Yes	Very well	Favorable
	12	Yes	Inadequate	Very favorable
	13	No		Very favorable
	15	Yes		Undecided
	18	Yes	Inadequate	Very favorable
	20	No		Undecided
	21	Yes	Very well	Undecided
	25	Yes	Fairly well	Very favorable
	27	Yes	Inadequate	Favorable
	27	Yes	Fairly well	Favorable
	30	No	Very well	Very favorable
	30	Yes	Very well	Undecided
	30	Yes	Very well	Favorable
	30	No	Very well	Undecided
	30	Yes	Fairly well	Very favorable
	45	No	Very well	Unfavorable
50-100 Employees				
	50	Yes	Inadequate	Favorable
	50	Yes	Fairly well	Very favorable
	80	Yes	Fairly well	Very favorable
	90	Yes	Inadequate	Undecided
101-200 Employees	155	Yes	Fairly well	Favorable
	165	Yes	Fairly well	Very favorable
	180	No	Very well	Unfavorable
201-550 Employees				
	375	Yes	Inadequate	Favorable
	500	Yes	Fairly well	Undecided
	510	Yes	Fairly well	Very favorable
Over 550 Employees	1500	Yes	Fairly well	Favorable

PROFESSIONAL SURVEY

Procedure

Questionnaires were sent to 160 professional associations and people providing professional services. Twenty-six (16%) surveys were returned. Those surveys returned are representative of the various types of professions located in the five-county study area.

Summary of Survey

Question 1: "What is the total number of employees in your organization?"

Number of Employees	Organizations	Estimated Total
1 - 3	15	30
4 - 6	5	25
7 - 10	1	8
11 - 15	2	26
16 or over	3	54
	Estimated Total	143

The estimated total of employees involved in the survey is reached by multiplying the median for each group range by the number of organizations responding in each group. Example: Since there are 5 replies who have between 4 - 6 employees: 5 x 5 = 25. Eighteen was used for the 16 or over group.

Question 2: "In your professional field, is there a need for two-year community college-trained personnel?"

Yes	20	(80% feel there is a need)
No	5	(20% feel there is not a need)

Question 3: "Are your present needs for such personnel served by existing postsecondary educational facilities in the area?"

Yes	16	(62%)
No	10	(38%)

Question 4: "If a two-year community college offering occupational programs in your field were established in the area, do you feel you would have a need for its graduates?"

Yes	19	(76%)
No	6	(24%)

Question 5: "What specific type(s) of occupational training program(s) would be desirable to your profession? (Indicate all which would be of use.)"

8	Accounting	11	General Business
___	Commercial Broadcasting	11	General Secretarial
2	Data Processing	4	Health & Welfare Services
3	Dental Assistant	2	Legal Secretarial
3	Dental Hygienist	7	Medical Lab Technician
4	Drafting	9	Medical Secretarial
1	Economics & Government	5	Nursing
3	Electronics Technology	1	Offset Printing
4	Engineering Technology	1	Photographic Processes
3	Executive Secretarial	4	Physical Therapy
		4	Technical Writing

Question 6: "If a two-year community college were established in your area, would you consider yourself a potential resource for the part-time instructional staff?"

Yes - 11 No - 9 Undecided - 6

CHAMBER OF COMMERCE SURVEY

Summary of Survey

Question 1: "Type of Business"

Auto Service	Security Alarm Systems
Trucking	Dentist
Insurance - 2	Attorney at Law
Stock Brokerage	

Question 2: "County in which your firm is located"

Lackawanna - 8

Question 3: "How many people are employed by your firm?"

60, 25, 15, 10, 6, 2, 1

Total number of employees represented = 119

Question 4: "Approximately what percentage of your employees do you believe need education beyond high school, but at less than the four-year college degree level?"

Up to 20%	2
20% to 40%	1
40% to 60%	1
60% to 80%	
Over 80%	4

Question 5: "Which of the following five general kinds of education do you believe these employees need? Please identify greatest need with a "1", next important "2", and so on."

Reading and Writing Skills	1, 1, 1, 3, 4
Mathematical Skills	1, 2, 3, 5, 5
Management, Communication, and Interpersonal Skills	1, 1, 1, 1, 1, 2, 3, 3
Applied Arts	2, 3, 4, 4
Applied Technology	1, 2, 2, 3, 5

Question 6: "In addition to the general categories listed above, please list specific kinds of training required by your firm below."

Auto Specialty Areas	Estate Planning
Securities	Typing, Shorthand
Sales	Dental Technician
Insurance	

Question 7: "Do you believe the needs which you have identified above are generally being met in the northeast Pennsylvania area at the present time?"

Yes	1
To a Limited Extent	3
No	4

Question 8: "Please list below those needs identified in Question 5 and Question 6 which you feel are unmet in the northeast Pennsylvania area at the present time."

Securities	Estate Planning
Sales	Dental Hygiene
Insurance	

Question 9: "Considering the information provided in the Newsbrief article last month, would you support the idea of a community college "without walls" to help respond to these needs?"

Yes	4
Not Sure	4
No	1

Question 10: "Does your firm have a formal in-company training program for employees?"

Yes	5
No	3

Question 11: "Do you feel that your firm would support a tuition assistance program for your employees enrolled in job-related community college programs?"

Yes	6
Not Sure	1
No	2

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